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Cancer of the Colon: Detection or Prevention

There is no question but that cancer detection clinics over the country have made great contributions to the prevention and cure of cancer. Were the name changed to "Cancer Prevention Clinic," it is probable that more patients with vague symptoms might seek help before it is too late. The average patient lives in fear of cancer and is certainly more interested in prevention than he is in detection of cancer, no matter how early the latter is found. It has been stated many times that each doctor's office should be a cancer detection clinic. Here again, the term "cancer prevention" might be employed.

It generally is agreed that cancer of the colon and rectum develops in benign lesions such as adenomas and papillomas that have been present for an undetermined length of time. How much better to locate and destroy such lesions early before they become malignant? To this end there are two simple methods available to the physician—the proctoscope in his office and referral to his colleague, the roentgenologist.

There is nothing mysterious or difficult about the proctoscope or sigmoidoscope. It is one of the simplest of the "scopes." The busy physician might say that he does not have the time or equipment. Certainly, he is busy, but with a little practice the examination can be accomplished easily in 60 seconds. He can surely afford that much time when the patient's life might be at stake. Certainly he does not have a trick "upside-down" examining table that some, but

not all, of the specialists use. The knee-chest position on any examining table or bed is just as good and may be better in some cases. Knee-chest means just that (not knees and elbows) with the thighs perpendicular to the table and the back "swayed in" as much as possible. Previous cleansing enemas facilitate the examination.

Digital examination always, without fail, should precede a proctoscopic examination. After passing the anorectal muscular ring (easily felt), the obturator is withdrawn and the instrument advanced under direct vision. Location and destruction by fulguration of a small polyp should give one a keen sense of personal satisfaction that he has probably prevented a cancer and that the patient has received a fair "shake" for his time and trouble. Many the patient who has made the fatal mistake of assuming that blood or other symptoms were due to hemorrhoids when cancer was present. Large hemorrhoids may be present and obvious to the physician, but the proctoscope can prevent the physician from making the same mistake as the patient. The busy practitioner might have a rule about whom to examine by proctoscope: (1) new adult patients as part of a routine physical, (2) adults who have had a polyp or those without symptoms every 1 or 2 years, and (3) patients of any age with rectal bleeding or other rectal complaints.

Roentgen examination of the colon is necessary for the location of lesions above the reach of the proctoscope. The roentgenologist thus becomes an invaluable member of the cancer prevention team. He locates small lesions that can be excised before they become malignant. Air contrast studies are considered necessary in the identification of small polyps and always should be requested.

The busy physician might have a rule to request colon roentgenograms for all patients with one of the following: (1) a history of blood mixed with or smeared on the stool, no matter the anorectal lesions present, (2) even one small rectal polyp, (3) blood smeared on the rectal wall, (4) blood on bits of stool in the rectum, and (5) cancer of the rectum (multiple lesions may be present). A personal study of the roentgenograms at a conference with the roentgenologist will prove invaluable.

Thus, the family physician has the leading role in cancer prevention. The average patient wants to be examined and appreciates a thorough examination. Hearing a complaint and dismissing a patient with a prescription should not be sufficient. Only by more and better examinations will we be able to accomplish much towards cancer prevention and detection.

—HARRY B. BURR, M.D., Houston.

Partnership at Work

"Partnership at Work"—this is how one might sum up the activities undertaken by heart associations throughout the United States to serve the people of their communities.

This partnership, of course, is that formed a decade ago by physicians and laymen when they reorganized the American Heart Association as a voluntary health agency. Today it finds concrete expression in the community service programs developed jointly by the lay and professional members of all heart associations.

The strength of these programs is the mutual understanding by doctor and layman of the role each plays in this effort. The physician is aware that the total needs of heart patients usually go far beyond medical care. Yet he cannot tackle singlehanded the many economic, social, and personal problems heart disease creates for almost all its sufferers. He knows also that advances toward prevention can neither be achieved nor universally applied without broad public sympathy and support.

On his side, the layman is conscious that the physician's guidance and participation are indispensable to the soundness of programs that deal with problems primarily medical in origin. Combining forces in the Heart Association, layman and doctor mutually enhance their indi-

vidual contribution to the well-being of patients and the health of the community.

During the past 10 years this "partnership at work" has set in motion activities as diverse and numerous as the people they serve.

Although physicians participate in the heart associations, the partnership has been carried a step further in Texas, where the Texas Medical Association's Committee on Cardiovascular Diseases and the Texas Heart Association have worked closely for the benefit of profession and public alike. The Texas Heart Association long has been meeting in conjunction with the Texas Medical Association's annual session, bringing distinguished speakers for the benefit of all members of the medical organization. An educational page for readers of the *Texas State Journal of Medicine* appears monthly under joint auspices of the two groups, and they collaborate in providing a speakers bureau for county medical societies and hospital staffs desiring information on latest advances in cardiovascular conditions.

Throughout Texas and the United States, during the month of February, physicians and laymen again become partners to raise funds which will be used in research, education, and community heart programs.

What of the future? It is bright with promise and hope. If the past offers a reliable guide to the future, we may anticipate new and significant developments in the control of heart and circulatory diseases—more often than not accompanied by the explanation that the scientists' work was supported by a Heart Association grant. We shall continue to advance and to accumulate new knowledge that concerns prevention, treatment, diagnosis, and cure. One some not-too-distant day, the components of a vast and highly complex jigsaw puzzle will fall into recognizable pattern, and we shall then know the underlying causes of atherosclerosis and hypertension. On that day medical science will stand on the threshold of the greatest victory of all time.

—GEORGE E. CLARK, JR., M.D. Austin.

A Good Service For a Wise Society

One of the most effective public relations activities of the Texas Medical Association is the work of its Speakers' Bureau, which presents the vital story of medicine to Texans of all professions across the state.

"The Best Medical Care for All Texans" is a snappy, 24-minute address illustrated with flip cards which has been especially prepared for presentation before men's or women's civic groups. It covers such points as medicine's positive programs for providing high quality medical care, dangers of federal encroachment, and advantages of maintaining private, personal medical attention.

Whenever C. Lincoln Williston, Executive Secretary, or Donald M. Anderson, Assistant Executive Secretary of the Texas Medical Association, are invited to visit county medical societies, they urge these societies to arrange a second talk on the same day, or the following one, before the local Rotary, Kiwanis, Lions, Optimist, or similar group, an effective and economical way of reaching many people in one trip.

Through this talk—given many times in many cities—the Texas Medical Association contacted 33 civic clubs and 3,500 civic leaders in 1958. On February 1, 1959, some 25 such talks had already been given this year or scheduled for weeks to come.

Hand in hand with this program for lay people, of course, goes the important Association service of providing speakers for county medical society meetings themselves. Through this service, any society may request speakers on socio-economic topics of interest to the profession or scientific talks by physician-specialist in such fields as heart, cancer, tuberculosis, or chest.

It is a wise county medical society which avails itself of both these services.

Never have the advances in medicine been more challenging to the doctor, and never has the medical profession had a greater need to tell the public the true story of medical care.

Holding the Line

When there are many areas in which taxpayers are being called on to foot the bills for health care which individuals should provide for themselves, it is a cheering note to find such groups as the Texas Commission on Higher Education and the University of Texas Committee of 75 holding the line against such trends.

The Commission on Higher Education, called on to review budget requests of the colleges and universities fully supported by the state, specifically recommended "that no General Revenue funds be used to support student health services at any of the eighteen institutions." The commission recognized that the type of health service rendered students on various campuses varies considerably and that varying amounts of tax monies have been expended for health programs at different schools. Furthermore, underlying its recommendation was the thought that anything except emergency care, perhaps, should be the responsibility of the student and his family. To this end, the commission further recommended that "legislative action authorizing additional fees will be necessary in some instances if the financing of these activities is to be effected through student fees" and that "the legislature give favorable consideration to institutional requests for this authority."

In its report on the University of Texas, issued in December, the Committee of 75 emphasized that "The University should not . . . extend the scope of personal service to students to include health care beyond that essential for protection or other welfare activities which are the responsibility of parents and the individual student."

★ Current Editorial Comment

Medical Education—Texas and Taxes

Traditionally, logically, and sociologically medical education has long been a primary responsibility and dedication of the medical profession. It is of the utmost importance that it always remain so.

By its very nature medical education is fundamentally apprenticeship training. Neither can a student learn the art and science of medicine without the closest association with his faculty preceptors, nor can any examination be devised in medical education comparable as an estimate of performance to the preceptor's personal knowledge of the medical student.

The extraordinary advances of medical knowledge in the past half century have appeared to many to obscure these truisms, and indeed have effectively erected unnatural walls between the practicing profession and faculties of medicine. Advances in medical education have been sensitive to advances in medical *knowledge* and, until recently, somewhat isolated from equally fundamental changes in the *economic* and *social* patterns of living wherein physicians practice the art and science they learned in the "ivory tower."

These statements, of course, are generalizations to which there are numerous exceptions. One cannot deny, however, that they are widely held today. The significant fact is that an increasing number of academic physicians and practicing physicians realize how essential medical education and medical practice are to each other. The curious thing is that this mutual essentiality is apparent in all four of the major components of our common responsibility: cost of medical education, quality of faculty, quality of students, and excellence of professional service.

Medical education is the most expensive of all courses of training, both to the institution

and to the student himself. Nationally it is estimated that for every tuition-dollar paid by a medical student for his course of instruction, at least $5 is invested in him from other sources. Two aspects of this matter are of vital importance to the medical profession as a whole: justification for the high cost and identity of the source of "the other $5." Medical educators in this state are wrestling with these problems daily.

Three major factors are responsible for the high cost per student of education in medicine. Qualified personnel for clinical and biological science teaching are in great demand and there is a relatively short supply. Programs in research (as essential for the recruitment of able faculty as for the advancement of medical knowledge) are expensive, developing new forms and refinements every year. Medical service in the form of hospital affiliations is involved fundamentally with medical education. No one can deny that teaching programs raise the cost of hospital care. Who pays the bills?

For us in medicine, the identity of the source of funds necessary to support our programs is of the utmost importance. Tuition charges, at least nationally, are close to the saturation point. Half of the nation's 82 schools are tax supported; half are private. An increasingly alarming number of medical schools—both private and state supported—are leaning heavily on the federal government for essential teaching, research, and construction needs.

Although medical educators nationally have been virtually unanimous in their expressions of confidence and satisfaction in the lack of control features in the huge total of federal funds being poured into medical education, we cannot base our program in Texas on this observation of experience over so few years. The narrower the distance between the source of the tax dollar and the site of its expenditure, and the more we can still remain dependent upon the philanthropy and generosity of free citizens, the sounder will be our educational freedom and basis for growth and development. Our stake in this is to arouse our citizens to a statewide effort before it is too late.

Money alone is of course no answer. *Quality of faculty* is as important to the profession as to the students. Adequate salaries are only a first requirement. Others more subtle and more complex relate to the medical profession's appreciation that the teachers and investigators among us deserve (1) an academic environment encouraging these talents and (2) an educational and professional consultationship involvement in our responsibility to make available to the sick the most modern skills and most experienced arts of our profession. This latter need never be in the nature of competitive practice if academic salaries are realistic and if we all sit down together and work the rest of it out.

Quality of students is presently a serious problem nationally as well as in Texas. There apparently is a negative recruitment by physicians within their own families and friends, as well as an ever increasing number of challenging careers in engineering, electronics, and the physical sciences. Also, there is the relative length and expense of the medical course in a period when more than 50 per cent of our students are married.

Our medical schools in Texas need the understanding support of the medical profession. Education itself requires special talents and training, but we are all members of the great tradition. Society places reasonable, and sometimes unreasonable, demands upon us. Let us together assert that such "unreasonableness" is more amenable to enlightenment through sympathetic persuasion, education, and evidence of united efforts in consideration of the patient, than to postures of paranoia and defiance.

In the last analysis, good medical care depends upon the skill of the physician and the confidence of the patient in our best efforts.

—JOHN B. TRUSLOW, M.D., Galveston.

♦ Dr. Truslow, Dean of Medicine and Director, University of Texas Medical Branch, Galveston.

President's Page

SAN ANTONIO BECKONS

DR. SMITH

In a few short days the Texas Medical Association annual session for 1959 will be under way in San Antonio. April 18-21 may seem far in the future, but it is high time anybody wanting to take advantage of the fine program shaping up for the session (full details of which will be printed in the *Journal* next month) get busy with hotel reservations and plans to clear the calendar for himself and his family to attend this Fiesta-charged event.

Although they are not new in 1959, the fact that a slate of exceptionally fine guest speakers (25 official ones plus another half dozen or more special participants from out of state) will be on hand, strong refresher courses and general meetings and section programs are scheduled, about 20 specialty societies will convene—these will mean a splendid meeting. Furthermore, an orientation program for new and transfer members and deliberations of the House of Delegates, while the particular responsibility of a few, will be of significance to all and will be open to any member of the Association.

Then look at some of the specials for 1959:

1. A series of three symposiums sponsored by Association committees to make Saturday a day worth while for any physician. Beginning with a look at cancer in Texas today during the morning, lunching in a combined group sponsored by the Committee on Cancer and the Committee on Nuclear and Atomic Medicine, continuing in the afternoon with information on clinical aspects of nuclear accidents, and then on some of the problems of occupational and industrial health, and concluding with a dinner emphasizing this latter subject, a doctor can be brought up to date in three areas of special concern currently. Guest speakers as well as Texans will participate in these discussions.

2. Memorial services at the Alamo. Tribute to physicians and their wives deceased during the past year will be paid in a setting hallowed by the blood of gallant men, including some physicians who served with Travis. Dignified, reverent, and of comfort to relatives and

close friends, these services should attract all of those who have arrived Sunday afternoon for the convention.

3. River Parade and entertainment, San Antonio style. Planned especially with dates to permit visitors to enjoy Fiesta events, this annual session includes in its schedule time for witnessing the spectacular River Parade Monday evening after alumni banquets. Too, Mexican music and floor show will highlight the entertainment at the President's Party Tuesday evening. I hope to see many of my friends at this dinner-dance, which will follow fraternity parties. More information about these festivities is given elsewhere in this *Journal*

4. A popularity poll for scientific exhibits. A new twist will be the opportunity for every doctor to vote for the scientific exhibits he thinks most valuable. Not only will the results give popular recognition to some of the exhibitors, but the reaction of viewers to the various exhibits will be helpful to the Committee on Scientific Exhibits in arranging for exhibits in the future. Official awards based on judging by a special committee will be continued. Although space for scientific exhibits appears now to be inadequate to permit all applicants to display their exhibits, that very fact should assure a high quality for all of the 35 or 40 that can be accommodated. These plus the array of commercial exhibits already contracted for will warrant careful attention.

5. A train and a newspaper. Through the cooperation of friends of the Association, conventioneers may be transported from place to place in holiday style via a jeep powered "train" which will run on schedule from hotel to hotel during the session. Other friends will underwrite a daily bulletin for distribution to all registrants. Both of these services will add much to the pleasure of the occasion.

The annual session completing his term of office is always a source of pride to a president, but I feel confident that the 1959 session, now rapidly approaching, will give value received to every Texas physician who is able to attend. There will be moments of fun, much information of practical value, and time for renewing friendships. Why not act now to be among those present?

Howard O. Smith M.D.

ORIGINAL ARTICLES

Resection Of Colon

JAMES D. RIVES, M.D.

New Orleans, Louisiana

RESECTION OF THE COLON is one of the most challenging problems that confronts the surgeon.

The operation is associated with a high mortality and morbidity because (1) the wall of the bowel is thin, having only one muscular coat; (2) it is partially covered by subperitoneal fat which interferes with the accurate approximation of the bowel wall in the suture line; (3) its circulation is relatively scanty and is segmental with few and variable anastomoses between the segments; and (4) its contents, which are at once solid, liquid, and gaseous, harbor innumerable pathogenic bacteria.

On the other hand, there are several facts that make the colon peculiarly well suited for surgical attack: (1) The organ is completely dispensable without impairment of the health of the patient; (2) it can be mobilized readily and completely so that resection of any part or all of it is relatively easy; (3) its lymphatic drainage is also segmental to a degree so a good cancer operation is feasible in most areas; and (4) it lends itself well to accurate diagnostic methods.

DEVELOPMENT OF TECHNIQUES

Previous to the introduction of anesthesia and asepsis the difficulties enumerated made colon surgery almost impossible, but the desperate state of patients with obstructive lesions led many bold surgeons to attempt it. In 1833, 9 years before the first general anesthesia and 32 years before Lister first used antisepsis in surgery, Reybard de Coisiat reported the successful resection of a cancer of the sigmoid colon with primary end-to-end anastomosis using silk sutures. The Royal Academy was understandably skeptical of this report, but it was confirmed by a committee of four appointed for that purpose. The patient survived for more than 10 months.

This case seems to have been the only successful one before the advent of anesthesia and antisepsis, but by 1880 there had been 10 resections done with 7 deaths. The operative mortality from that time on continued to be about 50 per cent until the introduction of the exteriorization procedures which were perfected and popularized by Mikulicz. It is difficult to say who first performed this type of operation, but according to Mikulicz, it had been done during the 1870's by many surgeons under the stress of circumstances. He credits the first planned procedure of this type to Block of Copenhagen in 1892. Apparently all surgeons had exteriorized the bowel and resected it at a second operation until Paul in 1893 (reported 1895) removed it during the first procedure and inserted large glass tubes into each end (fig. 1). This was a distinct improvement in the operation and was the legitimate ancestor of the obstructive resection of Rankin (1930). According to Rankin, Hochenegg was the first to make an attempt to remove the regional lymph nodes.

Many, if not most, surgeons think of this type of resection as Mikulicz's operation and with some justice because he undoubtedly improved it and sold it to the profession in 1903. His procedure has been criticized on the grounds that he did not resect the mesentery and regional lymph nodes and that delayed removal of the exteriorized loop led to implantation of the tumor in the abdominal wound. These criticisms can be explained only on the grounds that his critics have not read his article be-

Dr. James D. Rives, head of the Department of Surgery, Louisiana State University School of Medicine, presented this article for the Section on Surgery at the Texas Medical Association annual session, April 21, 1958, in Houston.

Preoperative preparation of the bowel by mechanical, chemical, and antibiotic means; improved preoperative and postoperative care; and improved techniques have made certain procedures relating to resection of the colon almost unnecessary. Nevertheless, such methods as exteriorization, proximal colostomy, and aseptic anastomosis—developed through years of effort—occasionally have value and should be familiar to every surgeon.

cause he clearly stated in his first report that the mesentery and regional nodes were removed and that after his first few cases he had routinely removed the bowel and inserted a tube into the proximal end. Thus he incorporated the ideas of both Hochenegg and Paul into his procedure although he was apparently unaware of Paul's report. Following his adoption of this technique, his mortality dropped from 42.9 to 12.5 per cent. The generally reported mortality at that time was about 45 per cent so Mikulicz's widely publicized report caused a revolution in colon surgery throughout the world.

For those who wonder why I am devoting so much attention to what is now widely considered an obsolete procedure, let me remind that as late as 1943 Jones reported that he had tried the obstructive resection in 77 cases after having used primary anastomosis for many years and had reduced his mortality from 14 to 6.5 per cent. In a less extensive experience I have never lost a patient on whom I used the Paul or Rankin method. It eliminates the danger of leakage at the anastomotic site, which, although much reduced, is still significant.

One of the reasons for the high mortality in colon surgery during this early period was that, since roentgen-ray examination was not available, the diagnosis was rarely made before obstruction occurred and that even then localization of the lesion was difficult or impossible. Both Paul and Mikulicz advised against resection, even by the two stage method, in the presence of acute obstruction, and surgeons today regretfully admit that this advice is still good in most instances. The mortality in acute colon obstruction at Charity Hospital in New Orleans is still about 30 per cent, which is disgraceful, but it is widely reported to be from 9.5 to 30 per cent. Most authorities still agree with Mikulicz that proximal colostomy should precede resection in all cases of acute obstruction of the colon when the definitive operation will require colon to colon anastomosis. There is considerable difference of opinion as to whether cecostomy or a double barrelled defunctionalizing colostomy is preferable, but no doubt each has its place. The New Orleans Charity Hospital mortality reported by Becker (30 per cent) is accounted for by the fact that his cases included only acute total obstruction and many cases were seen very late.

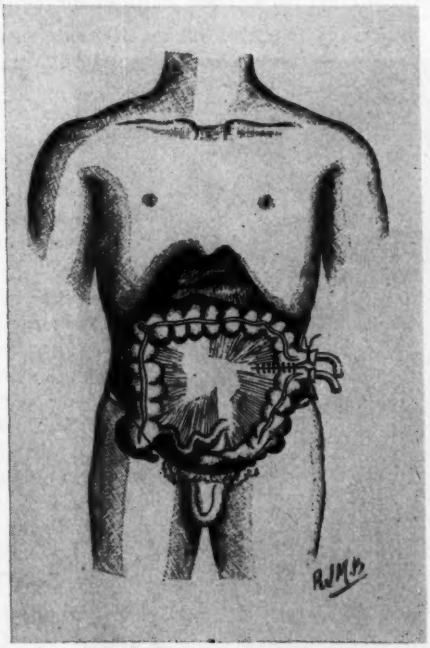

Fig. 1. Exteriorization resection of colon with glass tubes inserted. (After Paul, F. T.: Colectomy. Brit. Med. J. 1:1136-1139, 1895.)

Colostomy is an ancient operation, and no doubt the earliest ones were accidental. According to Rankin, deliberate colostomy was first proposed by Littre in 1710 for the treatment of imperforate anus and first performed in an adult by Pillore in 1776. Time will not permit a review of the history of this procedure. Suffice it to say that it was at first purely a palliative procedure used for cancer or imperforate anus, and a lumbar approach was preferred to reduce the danger of peritonitis. After the development of aseptic technique, the anterior approach became popular. In 1884 Pollisson proposed the use of temporary colostomy preliminary to resection of the colon, and in 1887 Schede first put it into practice. However, closure of the colostomy entailed a prohibitive risk until Paul and later Mikulicz revived the spur crushing method of anastomosis devised by Dupuytren in 1828 (fig. 2), which made extraperitoneal closure of the colostomy practicable. This was another landmark in the development of colon surgery, but it could not then and cannot now completely overcome the consequences of prolonged neglect of colonic obstruction.

Improvements in technical methods, preoperative and postoperative supportive treatment of the patient, preoperative and postoperative care of the bowel, and the use of antibacterial drugs have made two stage operations for unobstructed lesions almost obsolete, but they were a tremendous step forward and, as I shall indicate later, still can be used to advantage under certain circumstances.

The next significant advance was the development of the closed or aseptic anastomosis. Halsted probably deserves the credit for this concept, but the basting stitch technique reported by Parker and Kerr in 1908 was the first really satisfactory method

and is the prototype of all the methods later devised by Stone, Rankin, Furniss, Wangensteen, and others. It should be mentioned that all methods now used in intestinal anastomosis employ the Lembert suture (1826) which in turn was based upon the principle of the ready agglutination of serosal surfaces enunciated by Lanfranc in 1796 and reaffirmed in 1812 by Promess.

The aseptic anastomosis was a great advance in colon surgery, but peritonitis remained a serious hazard in primary colon anastomosis until means were found to empty the colon and reduce its bacterial flora prior to operation. No one man is entitled to the credit for the systematic cleansing of the colon before surgery, but most of my generation learned it from Miles, who taught us to do it by means of a low residue diet, saline laxatives, and enemas or flushes. The younger surgeons are probably not aware of the fact that by this regimen the colon can be cleansed to the point that it contains almost no feces and so little gas that the odor is not noticeable when the bowel is opened. Furthermore this can be done in the presence of a moderate degree of chronic obstruction. This, however, does not reduce the number of pathogenic bacteria per unit of colon content, so the introduction of intestinal antisepsis with relatively nonabsorbable sulfonamides by Firor and Jonas (1940) was another important advance, especially in those cases in which the bowel cannot be adequately emptied. Since that time investigators, too numerous to mention, have developed methods of colonic antisepsis using various antibiotics, with or without sulfonamides, singly or in combination, that accomplish the desired effect better and faster. Poth, who collaborated with Firor in his early studies, has been the acknowledged leader in this field and deserves more credit than any other individual, although I believe that he has developed a degree of confidence in the antibiotics that, in the hands of most surgeons, will prove to be dangerous.

Cohn has devised a simple and effective method of continuing the antibiotic protection of the anastomosis during the critical period of healing. He also has established by carefully controlled animal experimentation that leakage at or disruption of the anastomosis is usually due to infection rather than technical errors and that this can be prevented even in ischemic bowel by postoperative antibiotic therapy delivered at the anastomotic site. Since leakage into the peritoneal cavity rather than contamination at the time of operation is the usual cause of peritonitis, his observations are of paramount importance. He also has demonstrated, under experimental conditions, that all three methods of colon protection, mechanical cleansing, preoperative antisepsis, and postoperative antisepsis, are of significant value.

All of these procedures are directed to the care of the colon, but the greatest advances in surgery of the past two decades have to do with the care of the patient. No one can say how much of the improve-

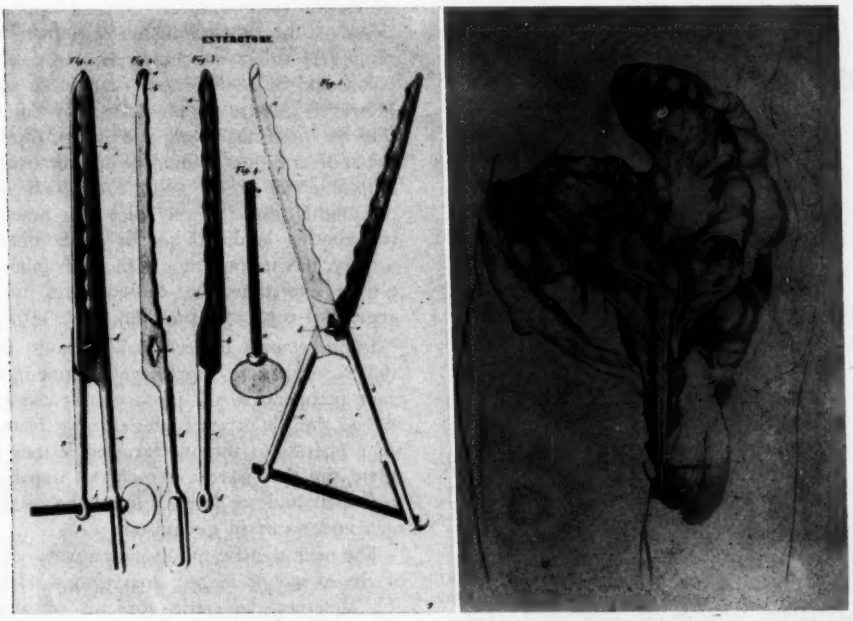

Fig. 2. Spur crushing enterotome with method of application. (After Dupuytren, G. B.: Memoire sur une methode nouvelle pour traiter les anus accidentels, Mem. acad. royale med., Paris 1:259-316, 1828.)

ment in the results of colon surgery are due to such advances. A few factors include (1) better understanding of fluid and electrolyte balance and its surgical significance, much of which was elucidated by Moyer while at Dallas; (2) recognition of the importance of serum proteins in wound healing as well as in other phases of convalescence (Ravdin and associates); (3) recognition of the role of vitamin C in wound healing; (4) appreciation of the importance of the reduced blood volume in chronically ill patients and its correction primarily by blood transfusion (Lyons); and (5) availability of blood banks.

I hope I have made it clear that the relative safety of modern colon surgery is the result of knowledge accumulated through the ages. Attention can now be directed primarily to increasing its effectiveness in the cure of diseases.

Following the trend toward supraradical surgery, several men, notably Wangensteen, Smyth, and Rosi, advocate resection of the entire left colon for malignant lesions anywhere in this segment as has been accepted practice in right colon lesions for many years. Since such a resection produces no serious physiological derangement nor any apparent deformity this is an entirely acceptable extension of the operation provided we evaluate it on a rational basis. Carcinoma of the colon does not spread widely in the bowel wall so any advantage of the extended operation must be in the increased amount of the lymphatic bed that can be removed. One must sacrifice 3 feet of colon to gain 4 or 5 inches of lymphatics. This also is entirely acceptable if we face the fact that this entails mobilization of the splenic flexure which, in the hands of most surgeons, adds significantly to the mortality and morbidity of the operation in aged and debilitated patients (Cattell[1a]).

It has been noted that implantation of carcinoma at the anastomotic site is not uncommon and that it seems to have increased in frequency since antibiotic preparation of the colon has become routine practice. Cole recommends that the bowel be ligated on both sides of the lesion before it is mobilized to minimize this danger. I have never observed this disastrous complication, and I suspect that it is usually due to implantation of carcinoma on the peritoneal surface rather than from the lumen of the bowel; but there is no valid objection to Cole's procedure, and it may prove to be of real value.

Blood borne metastasis is equally as important as lymphatic spread and is much less amenable to treatment. According to Engell, cancer cells were demonstrated in the circulating blood in patients with advanced cancer as early as 1869. This observation was confirmed in 1934 by Pool and Dunlap, and interest in the subject was revived by Engell in 1955. Fisher and Turnbull have shown that the number of malignant cells in the circulating blood is doubled after handling of the lesion. It is also reasonable to suppose that anticancer drugs may reduce the viability of these cells and lessen the likelihood of their implantation in the liver or elsewhere. There is now in progress a nationwide trial of this idea under the direction of Dr. George Moore of Buffalo. It may well be that this will prove to be an important adjunct to the surgical treatment of cancer.

USEFUL PROCEDURES

It is evident that we have a heritage of well tried procedures and a promise of new ones with which to combat surgical lesions of the colon. Unlike many surgeons I believe that most of the old ones are still useful and should be mastered by every general surgeon.

Exteriorization resection, now considered obsolete by many surgeons, is still valuable.

1. It is the best method of handling severely traumatized segments of the colon. There is no point to leaving nonviable bowel upon the abdominal wall to act as a culture medium for pathogenic bacteria.

2. It is the simplest and safest method of handling gangrenous volvulus of the sigmoid.

3. It is a very useful expedient when one finds at operation that the bowel proximal to a partial chronic obstruction is still stuffed with feces.

4. In the presence of local nonsuppurative infection in diverticulitis or carcinoma it is often safe to resect the bowel by exteriorization rather than to do a proximal colostomy—a two stage procedure instead of a three stage one.

5. When the condition of the patient demands a quick and simple procedure, it is invaluable.

If any degree of obstruction is present, I prefer the Paul type of resection. If not, the Rankin type is preferable.

The usual criticisms of these operations are that they do not permit adequate removal of bowel mesentery and lymphatics and that they increase the hospital stay days. The first criticism arises from a failure to understand the procedures. One can and should proceed exactly as if a primary anastomosis is to be done, but when that point is reached the cut ends of the gut are brought through the wound to the skin level or above. Any or all of the colon can be removed with appropriate portions of the mesentery and lymphatic structures. The patient is relieved of all danger of leakage or malfunction of the anastomosis which may, in a poor risk patient, make the difference between life and death. Insofar

as the hospital expense is concerned, let me remind that funerals are also expensive.

Proximal colostomy before or at the time of resection, infrequently employed in recent years, is also invaluable under certain circumstances.

1. Of course it is generally agreed that in the presence of acute peritonitis associated with the lesion or of fistulas to the skin surface or to an adjacent viscus the proximal colostomy is almost always essential.

2. When a colon to rectum anastomosis is made deep in the pelvis in a fat patient, I occasionally feel that it is insecure and prefer to make a proximal colostomy at the same time, but I have not actually done so since I adopted Cohn's postoperative antibiotic protection of the anastomosis.

3. I still believe that in acute obstruction distal to the hepatic flexure, cecostomy or transverse colostomy always should precede resection. The proximal bowel is distended with highly septic material, its wall is ischemic due to stretching and often infected, and the patient is often too ill to stand extensive surgery. I am aware of the fact that Poth has obtained good results with primary anastomosis under these circumstances by emptying the distended loop so far as possible into the segment to be resected and introducing appropriate antibiotics into the site of anastomosis, but I believe that this method is dangerous in most hands including my own. The condition of such patients is often very poor, peristalsis may not be active enough to empty the bowel through the rigid anastomosis for several days, and when it does the antibiotics will be carried into the distal loop which does not need them leaving the septic contents of the proximal loop to bathe the anastomosis.

I agree that in right colon lesions, even in the presence of obstruction, primary resection can and usually should be done, for the contents of the ilium are liquid, the anastomosis is in effect a small bowel one, and the proximal bowel can be decompressed if necessary by a long tube. Even in these cases, however, if the patient is in poor condition from dehydration, electrolyte imbalance, or other causes, I prefer to do an ileocolostomy at the appropriate site and defer the resection until suitable supportive treatment can be carried out and until the anastomosis is functioning.

Aseptic or closed anastomoses have been made unnecessary by improved preparation of the bowel and of the patient, but they are elegant procedures and have a strong appeal to fastidious operators. Many surgeons still use one or the other of these techniques, and it seems probable that they always will be used to some degree.

PREPARATION OF BOWEL

Cohn has demonstrated to my satisfaction that mechanical cleansing of the bowel is still an important part of bowel preparation. No matter how effective the sulfonamides or antibiotics may be in sterilizing liquid feces, they cannot affect the bacteria in solid masses of feces, so I do not consider any regimen satisfactory that does not include emptying the colon. The sulfonamides have been superseded by the antibiotics because of their much quicker action, but since some patients cannot tolerate the antibiotics it is well to keep the sulfas in mind and to remember the debt that we owe to Poth and Firor.

It is well to remember that pseudomembranous ileocolitis rarely if ever follows sulfonamide therapy whereas it does occasionally occur after broad spectrum antibiotic preparation of the colon, and in my experience moderate degrees of diarrhea have been fairly common. It is difficult to determine the etiology of these complications because yeast forms overgrow the cultures so rapidly, but in my hands the mild forms have responded so rapidly to erythromycin it seems probable that resistant Staphylococci rather than yeasts are responsible. I am considering the routine use of this or a similar antibiotic during the immediate postoperative period. Cohn has found that nystatin combined with his preoperative antibiotic formula will inhibit the yeasts but prefers to hold it in reserve for those patients who exhibit postoperative diarrhea. In any event, one should bear in mind that a wise man does not lightly tamper with the delicate microbiotic balance of the colonic flora.

The correction of the physiological disturbances associated with diseases of the colon treated by surgery is not old, and we should bear in mind the fact that if the men who bequeathed to us the technical procedures that we use so unthinkingly had had blood banks, a knowledge of blood volume and of fluid and electrolyte disturbances, and a battery of antibacterial drugs, they might well have obtained results as good as or better than ours.

CONCLUSIONS

Methods of resecting the colon have reached such a state of perfection that when acute obstruction is not present the operation is relatively safe. This has come about slowly over a period of almost a century during which countless thousands of patients have died who could now be saved. Every significant advance was arrived at after years of trial and error or after thorough laboratory and clinical investigation. They have been tried in the fire by hundreds of surgeons, and each of them has proven valuable

under some circumstances. It is, therefore, imperative that a competent colon surgeon know how and when to use them all. None of them should be forgotten and none should be abandoned until alternate methods have been proven to be better.

The problem of long standing acute obstruction of the colon has not been solved and probably never will be so our efforts should be directed toward its prevention and early recognition.

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The maternal mortality rate in this county has declined 93 per cent in the last four decades, Health Information Foundation points out. One maternal death occurs in approximately 2,300 live births today, compared with 1 maternal death for each 165 live births in 1915.

Management of Adenomatous Polyps of Colon And Rectum

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EARLY DETECTION and treatment of malignant disease is a great challange to the medical profession, but the ultimate ideal is the diagnosis and proper treatment of potentially malignant processes before invasive malignancy has occurred. Adenomatous polyps of the rectum and the colon offer one of the few opportunities encountered in medicine today to eradicate a potentially malignant disease before it has become frank cancer. The management of adenomatous polyps of the rectum and the colon is currently receiving considerable space in the literature, and the proper surgical therapy is a much debated and controversial question to which no definite answer has been found. It is our purpose to review a personal series of cases and attempt to find the most logical manner of therapy in the light of our present knowledge of this disease.

The relationship of adenomatous polyps of the rectum and the colon to carcinoma of these organs is now well documented by many observers and is generally accepted. It has been pointed out by several authors that the percentage distribution of polyps and cancer of the rectum and the colon is almost identical; that the incidence of polyps and cancer varies proportionately in the two sexes and various races; and that there is a definite time lag between the formation of adenomatous polyps and the development of frank carcinoma of the rectum and the colon. There is abundant histologic and cytologic evidence showing that adenomatous polyps may undergo malignant change and that most, if not all, cancers of the rectum and the colon originate in a preexisting polyp. Histologically, there is no cellular difference between the solitary and the multiple adenomatous polyp and those found in familial polyposis. Some observers feel that all polyps, therefore, should not be considered benign or premalignant lesions but instead, true malignancies at a very early stage of development. This concept, combined with the high incidence of multiplicity of polyps, has led

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A review of 100 consecutive patients with adenomatous polyps of rectum and colon suggests that all such polyps should be removed. For polyps above the peritoneal reflection, total exploration with coloscopy should be done. Evidence of invasive carcinoma, broad based large suspicious tumors above the peritoneal reflection, and clusters of polyps should be resected. Patients should be followed closely the rest of their lives.

some surgeons to advocate extensive and radical surgical procedures such as subtotal colectomy for single colonic polyps. Others have taken the opposite stand and advocate the most minimal procedures unless frank invasive cancer is present.

The exact incidence of adenomatous polyps in the general population is, of course, unknown; however, the increasing practice of the large clinics and medical centers of including proctosigmoidoscopy in the routine physical examination of all patients is providing more information. Generally it is stated that 3 to 10 per cent of the general population will be found to have polyps of the rectum or the colon; however, it was recently reported that 11.5 per cent of 7,608 patients examined at the Cancer Detection Center of the University of Minnesota were found to have polyps on their initial examination and an additional 7.7 per cent were found to have polyps on subsequent examinations; thus 19.2 per cent of patients exhibited polyps on at least one examination. These patients were 45 years of age or older.[5] Similar reports from the Mayo Clinic have indicated an incidence of 12 per cent and 10 per cent in patients of this age group.[7, 8]

Multiplicity of adenomatous polyps is an important factor in the management, and it is becoming apparent that the incidence of multiplicity is greater than previously appreciated. In the series of patients with polyps from the University of Minnesota 38 per cent were found to have 2 or more lesions on one or more examinations. Deddish and Hertz have reported additional lesions undetected by roentgen ray in 46.6 per cent of patients with polyps.[4] Bacon found 33 per cent of 200 patients undergoing exploration for colonic polyps to have multiple polyps.[1]

Probably the most important single factor in the management of adenomatous polyps of the rectum and colon is the incidence of carcinoma. There are wide variations in the reported incidence of malignant change. In the series reported from the University of Minnesota 454 lesions were subjected to biopsy using the proctoscope. Of these only 3 were diagnosed adenoma with malignant change, without invasion, and 12 were adenoma with malignant change, with invasion, or frank adenocarcinoma. Bacon has reported an incidence of 3.4 per cent of invasive carcinoma and 11 per cent of carcinoma in situ. Scarborough and Klein reported a similar incidence of 11 per cent,[9] and Castro, Ault, and Smith, an incidence of 45 per cent.[3]

The villous type of adenomas presents a somewhat different picture from the pedunculated adenoma when the incidence of malignant change is considered in the villous type alone. Ewing[6] has found from 10 to 20 per cent of villous tumors to have malignant degeneration; Welch, McKittrick, and Behringer have shown that malignancy is demonstrable in 22 per cent of papillary villous tumors as compared with 17 per cent in pedunculated adenomas.[11] Bacon found 35.7 per cent of villous tumors to have either focal adenocarcinoma or proliferating areas of well differentiated papillary adenocarcinoma without gross or preoperative evidence of malignancy including biopsy.[2] Sunderland and Binkley reported their findings of malignant degeneration in 68 per cent of villous tumors.[10]

The malignant potential of diffuse adenomatous polyposis or familial polyposis of the colon has long been recognized. The high incidence of frank carcinoma present at initial exploration usually places these cases in the frank cancer category. Bacon has found carcinoma in 82.7 per cent of his cases of diffuse adenomatosis, and it is generally conceded that if left long enough, 100 per cent of these cases will develop carcinoma. Colectomy is the accepted treatment; however, some controversy exists in the management of the rectal segment, that is, whether total colectomy with proctectomy or colectomy with ileoproctostomy should be done. Much space in the literature has been devoted to this problem; however, it is not within the scope of this paper.

CLINICAL STUDY

The material for this review is obtained from 100 consecutive patients with adenomatous polyps of the rectum and colon. Excluded from this group are all patients with small polyps which were fulgurated without biopsy, satellite polyps removed with carcinomas, adenomatous polyps which were grossly altered by malignant invasion so that the architecture of a polyp was not retained, and other polypoid lesions such as carcinoids, leiomyomas, and lymphoid hyperplasias. In each instance, whether single or multiple, the polyps were considered to be grossly

and clinically benign. The method of treatment chosen in each case was based on that assumption.

The gross pathology encountered in this series is basically of two types: that is, the simple adenomatous polyp with or without a smooth pedicle, and the broad based, soft velvety villous type adenoma or villous papilloma. Each polyp was reasonably soft, flat or pedunculated, movable, and nonulcerated except possibly for small areas of erosion on the surface of the head of the polyp. The microscopic diagnoses include benign adenomatous polyp or adenoma; benign adenoma with atypism, which we have included with the benign group; adenomatous polyp with adenocarcinoma; adenoma with carcinoma in situ; noninvasive adenocarcinoma; benign villous adenoma or papilloma; and villous adenoma with adenocarcinoma; also polyp or villous papilloma with invasive carcinoma usually designated as grade 2 adenocarcinoma. In this series we have included in the group of "malignant polyps" all polyps having any area of adenocarcinoma; however, special mention will be made of those having invasive carcinoma.

DISTRIBUTION

In this series of 100 cases there were 61 females and 39 males. The ages ranged from 3 years to 74 years; the average age was 51.5 years.

The distribution was 58 cases with rectal polyps and 42 with colonic polyps. The sigmoid was the segment of colon most often involved, with 33 of the 42 cases. There were 5 with involvement of the descending colon, 3 of the transverse colon, and 1 case in which all segments of the colon were involved.

Multiple polyps were found in 29 of the 100 patients. Multiple rectal polyps were found in 18 of the 29 patients, and 11 patients had multiple polyps involving either the colon alone or the colon and the rectum.

Separating the benign group into simple adenomas and villous adenomas, we found simple benign adenomas of the rectum in 33 cases, sigmoid 20, descending colon 3, transverse colon 3, and all segments of the colon contained benign polyps in 1 patient. This is an unusual case and probably represents a rare instance of diffuse adenomatous polyposis before malignancy has occurred. There were 4 benign villous adenomas of the rectum and 3 of the sigmoid. Thus, of the total 100 cases, 60 revealed no evidence of malignancy.

Polyps demonstrating malignant change were found in 40 of the 100 cases. Simple or pedunculated polyps were present in 33 cases and villous types in 7 cases. All of the 7 villous adenomas with carcinoma were found in the rectum. Of the 33 simple polyps 18 occurred in the rectum, 13 in the sigmoid, and 2 in the descending colon. The youngest patient in the group having malignant polyps was 16 years of age.

Of the 25 lesions exhibiting malignancy in the rectum, 6 had invasive carcinoma. Three of these were the villous type. In the colon 4 of the 15 malignant polyps contained invasion of the pedicle. Thus, a total of 10 cases of the 100 demonstrated invasive carcinoma.

TREATMENT AND RESULTS

For discussion of the management of adenomatous polyps of the rectum and the colon we may divide them into two large groups: those which lie below the peritoneal reflection, that is, distal to the upper rectum, and those lying above the peritoneal reflection or in the abdominal portion of the colon. These groups may then be divided into simple polyps and villous adenomas.

Rectal Polyps.—There were 47 cases of simple polyps lying below the peritoneal reflection. In all of these cases the polyps were totally excised by snare or biopsy forceps followed by fulguration. Eighteen of these polyps contained carcinoma, and 3 of the 18 had invasion of the pedicle. Of the 15 without invasion there was 1 patient who developed a carcinoma of the rectum 4 years after local excision. This patient died postoperatively after a combined abdominoperineal excision. There has been no evidence of recurrence in any of the other noninvasive cases. One of the 3 patients with invasion of carcinoma in the pedicle had a local recurrence about 4 months after excision and fulguration. Her general condition was poor, and further surgery was not recommended. She died shortly thereafter from other causes. The other 2 patients with pedicle invasion have had no evidence of recurrence 2 and 3 years after local excision.

Rectal Villous Adenomas.—Villous adenomas were found below the peritoneal reflection in 11 patients. In all of these excisional biopsy and fulguration was done. Four were benign. Each of these was totally excised and fulgurated locally, usually under anesthesia in the hospital. There has been no recurrence. Of the 7 villous tumors exhibiting malignancy, 3 were considered invasive. One of these had local excision with fulguration. Eight years later a small recurrence was fulgurated, and this patient has now been clear for 6 years. The second had an initial local excision with fulguration and has shown no evidence of recurrence for 7 years. The third refused further treatment after the first initial biopsy; 6 months later this patient suffered intestinal obstruction and a combined abdominoperineal excision was done. There were regional node metastases. There was local recurrence in 6 months, and the patient subsequently died. Of the 4 patients with noninva-

sive malignant villous tumors, 1 had an initial combined abdominoperineal excision because of the size of the tumor. This patient has been well for 16 years. Each of the other 3 patients had initial local excision and fulguration. One of these had a recurrence 5 years later; the biopsy diagnosis was adenocarcinoma and a combined abdominoperineal excision was performed. There has been no evidence of recurrence for 9 years. Another patient had a local recurrence 10 years after the initial excision and fulguration. Biopsy of this recurrence was reported benign villous papilloma, and complete fulguration was carried out. There has been no recurrence for 12 years. The third had local excision and fulguration and was lost to follow-up 2 years later.

Colonic Adenomas and Villous Tumors.—The surgical treatment of adenomatous polyps lying above the peritoneal reflection or within the abdomen requires an exploration of the peritoneal cavity and a full major preoperative preparation. The bowel must be cleansed and sterilized in the usual manner, and the surgeon must be prepared to carry out an extensive and radical procedure if unsuspected or undiagnosed cancer is found. In all instances the abdomen is opened widely and the entire colon is examined by palpation and inspection. If a grossly malignant lesion is found, the proper resection is carried out. If not, it is our policy to do total coloscopy using a sterile sigmoidoscope through 2 or more colotomy incisions.

In this series there were 3 villous tumors of the colon, all in the sigmoid. Because of the broad bases and radiographic evidence of irregular surfaces, primary resections were performed. There have been no recurrences.

There were 39 patients with adenomatous polyps of the colon. Twenty-four of these had the histologic diagnosis of benign adenomatous polyp, and 15 had carcinoma present. Four of these 15 had invasion of the pedicle.

In 31 of the 39 patients initial colotomy and polypectomy was performed. Of the 31 cases, 22 were benign and 9 were malignant. One of these malignant polyps was diagnosed carcinoma in situ. Two years later, however, there was recurrence with frank carcinoma for which resection was done. Two of the 9 malignant polyps had evidence of invasion on permanent sections. These 2 were subjected to resection about 8 days after the initial surgery. One patient had invasive carcinoma found in a sigmoidal polyp which had been excised through the sigmoidoscope. Sigmoid resection was performed. The fourth case of invasive carcinoma was that found in a very large sigmoidal polyp which was producing obstruction by its size. Resection was performed in two stages. Primary resections were carried out in 6 additional patients with adenomatous polyps. Two of these were benign. In 1 a preoperative biopsy through the sigmoidoscope was reported carcinoma, but the postoperative specimen was benign. The other was the case of benign multiple polyposis in which total colectomy was performed. Four of the patients having primary resections had polyps demonstrating noninvasive carcinoma. Two had preoperative sigmoidoscopic biopsy reports of carcinoma but postoperative pathologic diagnosis of carcinoma in situ; 1 patient had 2 adjacent polyps, 1 pedunculated but rather firm and the other a small sessile polyp. The final patient had a polyp with noninvasive carcinoma in a segment of diverticulitis of the sigmoid for which resection was performed.

In none of the cases of polyps of the colon has there been evidence of recurrence.

CONCLUSIONS

With this review in mind we have formulated what we believe to be a sound and logical approach to the management of adenomatous polyps of the rectum and the colon consistent with our present knowledge of this disease process:

1. All polyps of the rectum and colon should be removed.

2. Adenomatous polyps, including villous adenomas, below the peritoneal reflection may be excised locally by snare or biopsy forceps and electrodessicated. If invasive carcinoma is found in the base of any polyp, a cancer operation should be performed.

3. For adenomatous polyps above the peritoneal reflection, total exploration with coloscopy should be carried out. Pedunculated polyps should be excised. If possible, frozen sections of the pedicle should be obtained, and if invasive carcinoma is found, immediate resection should be carried out. The same is true if invasive carcinoma is found in the permanent sections, that is, subsequent resection should be performed.

4. Broad based large suspicious tumors above the peritoneal reflection should be treated primarily as cancer.

5. Segmental resection should be performed for small clusters of polyps or several polyps in the same area.

6. Postoperatively all patients should be followed closely for the remainder of their lives with routine proctosigmoidoscopic examinations and radiographic studies of the colon.

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Surgical Management of Cancer of The Prostate

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Dr. J. H. Arnold offered this paper from the Departments of Urology of Baylor University College of Medicine and the University of Texas Postgraduate School of Medicine for the Section on Surgery at the Texas Medical Association annual session April 22, 1958, in Houston.

Early prostatic cancer has no clinical symptoms nor cystoscopic signs, but frequent periodic rectal examinations help in discovery of such cancer in an operable stage. Fifty-three of 54 chairmen of departments of urology of medical schools treat early prostatic cancer by radical surgery. Routes of dissemination of malignancy and techniques of operation are described.

CARCINOMA of the prostate is a slowly growing but surely progressive disease most common in men past 50 years of age. The United States Public Health Service reports a 38 per cent increased incidence of carcinoma of the prostate as cause of death for the 10 years from 1938 to 1948. In 1952, in the areas surveyed, it ranked second as cause of male cancer deaths, accounting for 16 per cent of such deaths. Incidence of carcinoma of the prostate reaches its peak 10 years later than carcinomas elsewhere. It is a disease rarely seen before 40 and most prevalent in the two decades after 60 years of age.

As vital statistics indicate that the Texas population 65 years of age and over has doubled since 1940 and nearly tripled since 1930, the doctors of the state may well pay increased attention to the condition. From 1950 to 1956 there were 411 reported deaths from this disease in Houston and 3,641 in Texas, with numerous cases undoubtedly being unreported. At Jefferson Davis Hospital in Houston, for the same period, 1,038 cases of benign prostatic hypertrophy were admitted along with 185 cases of prostatic carcinoma, an incidence of 18 per cent. Flocks of Iowa has reported an incidence of 20 to 25 per cent of carcinoma in the benign hypertrophies there; Deming at Yale, a 25 per cent incidence. Johns Hopkins Hospital has reported a 21 per cent incidence. Autopsy figures supplied by Rich, Muir, Gaynor, Moore, Kahler, Baron and Angrist, and others indicate that 20 per cent or more of men over 50 have histological evidence of carcinoma in their prostate glands. The disparity between this figure and actual recorded causes of death has led many to believe that this so-called latent carcinoma is different from clinical carcinoma, but the increasing incidence of prostatic carcinoma as the cause of death and the failure to find any histological evidence that the two conditions are not the same tends to lend support to Hudson's statement that "the latent prostatic carcinomas of 1950 are the metastasizing carcinomas of 1960."

Early clinical carcinoma is characterized by no urinary disturbance nor cystoscopic signs. It is completely without symptoms, arising as it does, in 80 per cent of the cases, in the posterior lamella of the gland (fig. 1). Only in advanced cases is urinary obstruction encountered, and roentgen-ray evidence and elevation of the serum acid phosphatase levels occur only after metastases. Thirty-five per cent of cases with metastases, however, do not show alterations in the acid phosphatase.

Early prostatic carcinoma can be cured surgically. Palliation is all that can be offered to the patient with metastases. Diagnosis of prostatic carcinoma while it is still in the operable stage depends on

Fig. 1. Prostate showing why early cancer, in 80 per cent of cases arising in the posterior lamella of the gland, causes no clinical symptoms.

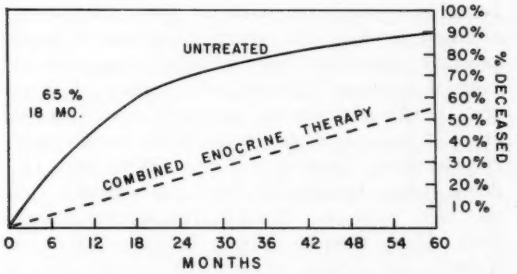

Fig. 2. Percentage of deaths occurring within 5 years in 1,818 cases of carcinoma of the prostate from 14 clinics untreated and treated with endocrines and transurethral resection in various combinations. [After Nesbit, R. M., and Baum, W. C.: Endocrine Control of Prostatic Carcinoma: Clinical and Statistical Survey of 1,818 Cases, J.A.M.A. 143:1317-1320 (Aug. 12) 1950.]

recognition of the indurated area at rectal examination before widespread extension occurs. Colby, McHeffey, Hudson, Deming, Colston, and others find diagnosis, based on rectal examination alone, is 75 to 85 per cent correct. Histological confirmation is desirable and may be obtained by needle or open biopsy, using either frozen or paraffin sections. Deming has claimed needle biopsy to be 63 per cent correct in early cases, Colby 71 per cent, Kauffman 61 per cent. The accuracy of the needle biopsy nears 100 per cent in advanced cases. Papanicolaou smears are not popular nor very accurate in this disease. Transurethral biopsy is not useful in early cases.

The oft quoted work of Nesbit and Baum (1951) reporting on figures from 14 clinics and 1,818 patients is summarized in figure 2, which shows the death rate in untreated carcinoma of the prostate cases in comparison with those receiving palliative

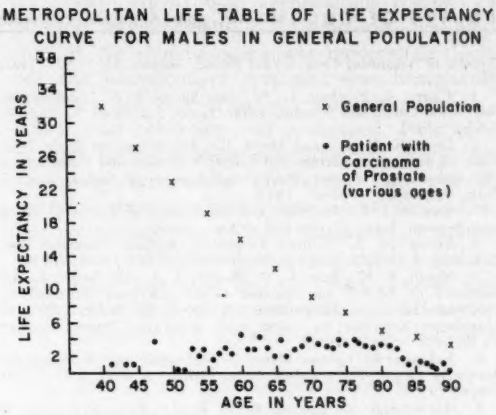

Fig. 3. Comparative expected life span and actual life span of 44 men of various ages with prostatic carcinoma treated by palliative means. [After Flocks, R. H., and Prendergast, L. J.: Treatment of Carcinoma of Prostate, Geriatrics 10:52-58 (Feb.) 1955.]

treatment consisting of endocrines and transurethral resection in various combinations. However, there is serious disagreement with these findings by other investigators who find the figures of Nesbit and Baum too optimistic, compiled as they were soon after the discovery of the endocrine treatment of prostatic cancer. Flocks has stated that, at Iowa, endocrine therapy used for palliation alone does not cure the disease nor retard it sufficiently to keep patients from dying of the disease in appreciable numbers. Figure 3 graphically indicates his comparative findings between the expected life span and the actual life span of 44 men of various ages with prostatic carcinoma treated by palliative means.

Smith and Woodruff, Melik and Naryka, Glanton, Fitzpatrick, Orr and Hayward, and others have concluded separately on the basis of extensive statistical material that while palliative therapy unquestionably brings marked relief from pain and often from obstruction, there is no basis for stating that it pro-

TABLE 1.—*Survival rates following various methods of treating carcinoma of the prostate.*

Treatment	Survival (%) 3 yr.	5 yr.	10 yr.
No treatment (Nesbit and Baum)	22	10	
Palliative treatment, endocrine and transurethral resection (Nesbit and Baum)	66	44	
Palliative treatment (Staublitz, Oberlike, and Lent)			24
Radical surgery with endocrines (Winfield Scott)	84		
Radical surgery (Jewett)			52
Radical surgery (Colston)			49

longs life. Sewell has stated that conservative therapy for carcinoma of the prostate in men 65 to 70 will lead to a death rate in 5 years of 80 to 90 per cent, whereas the normal death rate in this age group is 40 to 60 per cent. A number of urologists find that radical surgery with and without endocrines significantly lengthens life and reduces symptoms. Figures comparing the results of endocrine therapy with radical surgery are given in table 1. Note the advantage attained by early diagnosis making radical surgery possible.

TREATMENT OF OPERABLE PROSTATIC CANCER

The chairmen of the departments of urology in every medical school in the nation were questioned by circular on their method of handling operable carcinoma of the prostate with and without obstruction. Fifty-four replied indicating their preference for treating operable prostatic cancer as follows: transurethral resection and endocrines 1, suprapubic prostatectomy 0, radical retropubic prostatectomy 8, radical perineal prostatectomy 45.

Of the 8 reporting chairmen who prefer radical retropubic prostatectomy for their surgical management of prostatic carcinoma, 4 would combine endocrine therapy with the operation and 4 would reserve it for subsequent use if needed as palliation. For confirmatory tissue diagnosis 3 would rely on frozen sections and 5 demand paraffin sections. Of the 3 relying on frozen sections, 1 would use open retropubic approach and 2 would secure the tissue by perineal punch. Of the 5 demanding permanent sections, 4 would obtain the tissue by perineal punch and 1 by transrectal biopsy.

Of the 45 chairmen preferring the radical perineal prostatectomy, 15 combine endocrine therapy with the operation and 30 would reserve it. Forty-two of the 45 urologists depend on frozen sections for their tissue diagnosis, 39 utilize open perineal exposure followed immediately by radical surgery if biopsy is positive, 2 obtain the tissue by perineal punch, and 1 by transrectal needle. Only 3 men in this group demand permanent sections. Two of these obtain the tissue at open perineal operation and one by perineal punch.

Of the reporting chairmen, 53 to 1 prefer radical open surgery in operable carcinoma of the prostate. It is therefore apparent that, at summit level, there is little disagreement as to the handling of these cases. The classical prerequisites indicating a gland to be suitable for radical removal are as follows: (1) the indurated area be localized to the prostate, (2) there be no fixation of the gland, (3) no metastases by roentgen examination, (4) serum acid phosphatase be normal, (5) an adequate life expectancy.

At Johns Hopkins Hospital 23 per cent of the prostatic cancers seen have been considered operable. At Walter Reed Hospital 54 per cent have been successfully treated with radical surgery. But among the urological surgeons at large, the figure falls closer to 5 per cent. There are two reasons for this. The first is that the general male population is not receiving the repeated rectal examinations necessary to achieve the figures comparable to those emanating from Johns Hopkins and Walter Reed. A second factor is that the surgeon who does not operate on at least some of his benign prostatic hypertrophies by either the retropubic or perineal route is not in a strong position to achieve successful radical surgery by either of these methods when the comparatively rare occasion calling for such approach presents itself. It is not therefore surprising that urologists who do not employ the retropubic or perineal approach for their conservative enucleations find few indications for the radical procedure in treating the less often encountered patient with prostatic carcinoma.

TECHNIQUE

It seems appropriate at this time to say a few words of explanation concerning the technique of various types of prostatic surgery.

The suprapubic operation is the open operative procedure with which the nonurologist is probably the most familiar. Classically this operation consists of the enucleation of an adenomatous obstruction within peripherally compressed normal prostatic components forming a surgical capsule (fig. 4). Thus the suprapubic prostatectomy is an adenomectomy or a subtotal prostatectomy. The transurethral resection (fig. 4) is designed to accomplish the same result removing prostatic tissue a chip at a time, working through the urethra with an endoscopic operating instrument. A total or radical prostatectomy is impossible by either of these two methods except as a surgical accident.

In cancer of the prostate, whether it is or is not associated with a benign adenoma, curative surgical treatment envisages, as a minimum, the removal of the whole gland, including the surgical capsule, and an anastomosis of urethra to bladder. This can be accomplished only by perineal or retropubic approach. Figure 5 (left) indicates the area of most occurrences of prostatic carcinoma, 80 per cent originating in the posterior lamella of the gland.

By the perineal or the retropubic approach either subtotal or total prostatectomy can be accomplished with extremely low mortality and with good func-

tional results. The lines of incision in total prostatectomy are indicated in figure 5 (left). The total removal of the prostate gland plus removal of the seminal vesicles is called radical prostatectomy. If the subtotal operation is desired, instead of using the lines of incision (or excision) pictured for radical prostatectomy, the capsule is opened and the adenoma enucleated. Removal of the seminal vesicles in most cancers of the prostate is necessary if cure is to be accomplished, as the predilection for extension is along the fascial planes exteriorly covering the seminal vesicles.

Invasion of the wall and lumen of the seminal vesicles is a late occurrence although extension of malignant cells along fascial planes immediately external and posterior to the seminal vesicles may occur relatively early. Nevertheless, the fascia of Denonvilliers protects the rectum from local metastases, and the rectum is seldom invaded from cancer of the prostate even in advanced cases (fig. 5, right). Prior to invasion of the walls and lumen of the seminal vesicles, these structures afford protection

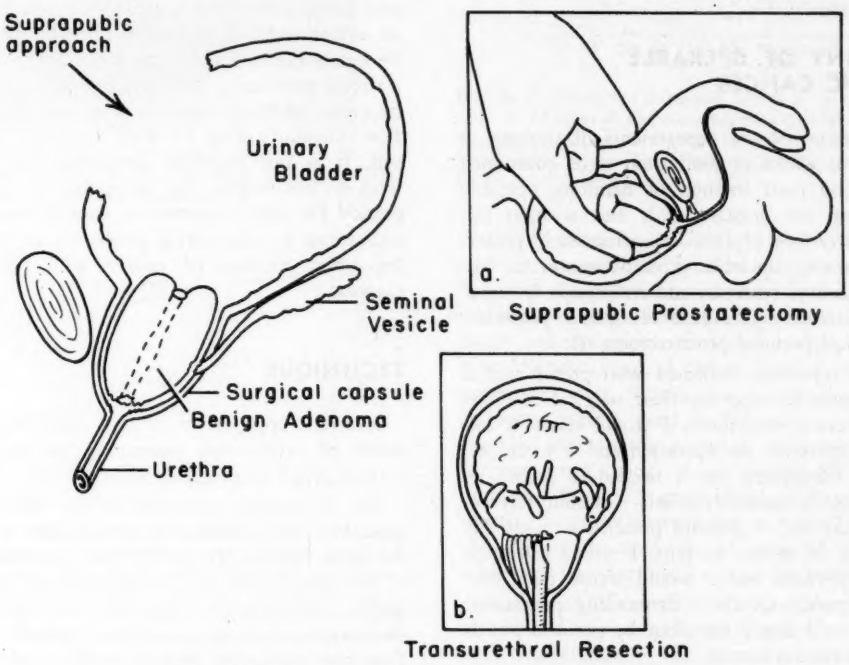

Fig. 4. Drawings showing the surgical approaches to suprapubic prostatectomy and transurethral resection.

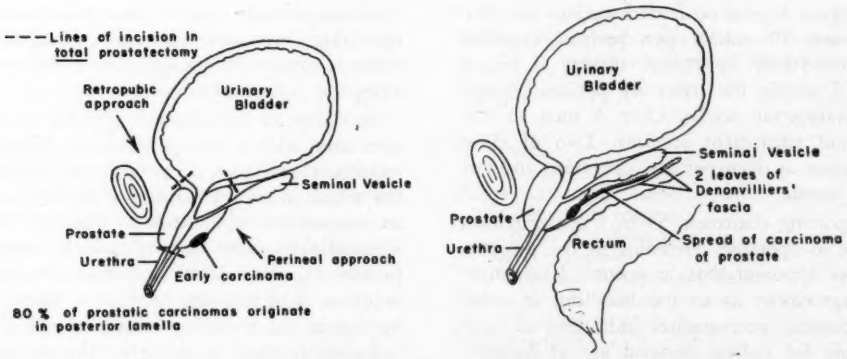

Fig. 5. Drawings showing the lines of incision for total prostatectomy and the usual sites for early prostatic carcinoma and local metastasis.

to the bladder from direct early metastases. Thus, complete excision of the tissues containing malignant cells is facilitated, making early radical prostatectomy the successful operation it is.

Patients with indurated prostate glands fulfilling the classical criteria for radical prostatectomy admittedly make up a small percentage of all cases of prostatic carcinoma diagnosed at present. However, the experience at Walter Reed Hospital, reflecting the repeated, careful rectal examinations done on men in the Armed Services, proves that diligent diagnostic efforts applied to the problem can significantly alter these figures. It may be that other factors also may alter the figures. Prostatic cancer may be divided into three groups on the basis of degree of extension of the malignant process. At one end of the scale are those patients with carcinomas which might be considered operable by the classical criteria—perhaps 5 to 10 per cent. At the far end of the scale are those with distant metastases making them, of course, candidates for palliation only.

In the middle however, are found an important group of patients. This group includes those patients with glands which do not strictly conform to the classical criteria in that the malignant process is not entirely confined within the prostate, but in whom there is only local spread without distant metastases. It is my belief that Kimbrough at Walter Reed Hospital has dipped into this group to achieve his figure of 54 per cent operability. Colston and Brendler, Winfield Scott, Parlow, Vallett, and others have reported actually doing this. Colston has reported, with good results, of administering estrogens for 6 months to shrink the gland before doing radical surgery on patients who fall into this group. I agree with this management in selected cases. Experience indicates that at the operating table the malignant process may be either less extensive or further advanced than indicated by previous rectal examination. When further advanced than expected, the case often may be, perforce, removed from the category of classical operability to one not classically operable. If the local extension is not too widespread, however, excellent clinical results may be obtained by completing the radical extirpation. This is true even if malignant cells may be left at the upper ends of the seminal vesicles or in pelvic lymph nodes, because, as Colston, Scott, and others have pointed out, though falling short of a complete cure, this procedure relieves obstruction permanently, prevents a recurrence of urinary distress, and the high-lying isolated malignant residue may be so slow growing that, with proper management, the patient's progress may resemble that of one in whom complete cure has been accomplished.

In conclusion, let it be emphasized that transurethral resection, endocrine therapy including administration of estrogens and cortisone, orchiectomy, adrenalectomy, hypophysectomy, radiation to the tumor by radiogold, chromic phosphate, or other isotopes or other alpha or gamma ray emitters including radium and roentgen ray are all palliative. Radical surgery itself falls into this category when it fails, as it occasionally may, to extirpate all the neoplastic tissue. Experience indicates, however, that in selected cases radical surgery offers the patient the most number of years with freedom from painful urinary symptoms afforded by no other management.

SUMMARY

Cancer of the prostate is on absolute, as well as relative, increase in the United States with carcinoma being found in one-fourth of hypertrophied glands.

Early prostatic cancer is characterized by no clinical symptoms nor cystoscopic signs.

Endocrine therapy is only palliative, but early surgery is curative.

Where frequent periodic rectal examinations are carried out, the frequency of discovery of cancer of the prostate in an operable stage is 10 times that found in the nation as a whole.

A survey of the chairmen of departments of urology in the nation's medical schools herein reported indicates 53 out of 54 treat early prostatic cancer by radical surgery.

Routes of dissemination of malignant process are described, as are techniques of operations.

CONCLUSION

If we are to provide the best in medical care it is imperative that more frequent rectal examinations on men be carried out and that all suspicious lesions be subjected promptly to biopsy so that radical surgical treatment may be carried out when indicated.

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A list of references may be obtained from the author.

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Extraordinary progress in the control of acute diseases has resulted in steadily growing importance of chronic diseases as causes of death in the United States, according to statisticians of the Metropolitan Life Insurance Company. Although those diseases developing rapidly or coming speedily to a crisis, as pneumonia, accounted for more than 40 per cent of the deaths at the turn of the century, currently the proportion is not quite 10 per cent. The major cardiovascular-renal diseases and cancer account for 70 per cent of the total mortality.

Carcinoma of the Renal Cortex

Pathology and Prognosis

JOHN H. CHILDERS, M.D.

Galveston, Texas

A LARGE NUMBER of publications have recorded the experiences of various individuals or groups with neoplasms of the kidney. An attempt will not be made to summarize the entire literature nor to introduce a different classification. The total experience with carcinoma of the renal cortex during a 10 year period will be related. No selection of cases was contemplated at the beginning of the study, and all cases admitted to the University of Texas Medical Branch Hospitals with a diagnosis of carcinoma of the renal cortex have been reviewed. The purposes of this review are to evaluate gross and microscopic findings, decide which of these findings are of prognostic significance, and learn more about the biological behavior of this disease. This presentation is primarily concerned with a restricted scope of a larger project which includes a study of all renal neoplasms.

Included in the category of carcinoma are all malignant, epithelial neoplasms that arise primarily in the renal cortex. Consecutive cases studied at the University of Texas Medical Branch from January, 1945, through December, 1954, have been reviewed with follow-up information being secured through the Tumor Clinic.

During the period of time referred to, a total of 90 malignant neoplasms of renal origin were accessioned in the Tumor Clinic records. Of these cases 52 were listed as carcinoma of the renal cortex. Five cases were eliminated from this study for the following reasons: no operative procedure or autopsy was performed, 2; no tissue was secured for biopsy at the time of operation, 2; tissue excised for biopsy was not conclusive as to the exact site of origin of malignancy, 1. Exclusion of these cases leaves a total of 47 patients with adequate histological studies. The average age of these patients was 56.8 years. Thirty-one cases occurred in males and 16 in females (ratio of males to females of 1.9:1). The right kidney was the primary site of origin in 32 cases and the left kidney was the primary site of origin in 15 patients. There was no significant difference in anatomical location in the two sexes. The distribution of the disease according to race corresponds with the ratio of white to Negro hospital population during this time. Incidence of carcinoma according to age is shown in table 1. The youngest patient was 29 years old and the oldest was 76 years.

TABLE 1.—*Incidence of Carcinoma of Renal Cortex by Age.*

Age in Years	Number of Cases
20-29	1
30-39	1
40-49	10
50-59	20
60-69	6
70-79	9

The material available for gross examination and histological study from these 47 patients was secured in the following manner: nephrectomy, 25; nephrectomy and autopsy, 8; autopsy, 6; excision of tissue for biopsy only, 8.

Thirty-nine of these cases would be suitable for detailed study, since the 8 patients who were diagnosed by histological study of tissue removed for biopsy did not subsequently have a nephrectomy or autopsy. In each of these 8 cases radiological and clinical studies confirmed the diagnosis of carcinoma of the kidney. Tissue was excised from the primary neoplasm in the kidney in 3 cases, from an osseous metastasis in 3 cases, from the right lower lobe of the lung in 1 case, and from the brain in 1 case.

GROSS PATHOLOGY

In reviewing the 39 surgical and autopsy cases, the size, location, position within the kidney, weight of the kidney, involvement of renal vein, extension through renal capsule, and extension into the pelvis were recorded. The size of each mass was recorded at its greatest diameter in centimeters. The allocation of 38 cases in which size of mass was recorded

Dr. John H. Childers, associate professor of pathology at the University of Texas Medical Branch, presented this paper for the Section on Pathology at the Texas Medical Association annual session in Houston, April 21, 1958.

A review of 47 cases of carcinoma of the renal cortex proves this an extremely treacherous neoplasm. Surgical specimens and/or autopsy studies were reviewed in 39 cases. Most commonly the carcinomas were the clear cell type. More favorable prognosis was indicated by absence of vein invasion and a histological type composed predominantly of clear cells.

resulted in the following distribution: less than 5 cm., 4; 5 to 10 cm., 22; more than 10 cm., 12.

The relative incidence of involvement of the right and left kidney has been referred to previously. Further localization of the site of origin was attempted on gross examination by evaluating the portion of the kidney in which the major part of the mass was located. This was demonstrated to be the upper pole in 16 cases, the midportion in 1 case, lower pole in 7 cases, and replacement of the major portion of the kidney in 11 cases. Multiple nodules of approximately the same size were noted throughout the kidney in 2 of the cases in the latter category.

In 30 cases in which the weight of the involved organ was determined, the kidney weighed 200 to 399 Gm. in 12 cases, 400 to 599 Gm. in 7 cases, 600 to 999 Gm. in 4 cases, and 1,000 Gm. or more in 7 cases. Gross extension to involve the vein in the hilus of the kidney was noted in 10 patients. In 1 case there was gross extension through the renal vein to involve the renal and adrenal veins of the opposite side. Extension through the capsule was observed in 29, while the pelvis was infiltrated in 22 cases. Other coexisting gross changes noted in the kidney included bilateral renal calculi in 2 patients and double ureter in 1 case.

HISTOLOGICAL STUDY

Multiple sections were studied from each neoplasm to determine the predominant cell type, grade of the neoplasm, extension, and vascular involvement. No detailed subdivisions based on a combination of acinar, papillary, and cytological patterns were determined. Cytologically there were three groups—clear cell type, granular cell type, and mixed granular and clear cell type. Twenty cases were classed as clear cell type, 11 as granular cell type, and 8 as mixed type. Grading according to the system applied by Hand and Broders[2] resulted in 7 cases being listed as grade I, 17 cases as grade II, 14 cases as grade III, and 1 case as grade IV. Sections taken at the hilar region of the kidney confirmed the gross observations of vein invasion in 10 instances and demonstrated microscopic areas of vascular invasion in 10 additional cases. Microscopic evidence of vein involvement was present in 20 patients.

TABLE 2.—*Distribution of Metastases in 10 Autopsies Following Nephrectomy for Carcinoma of the Kidney.*

Anatomical Site	Number of Cases
Lungs	6
Bone	5
Liver	4
Adrenal gland	5
Lymph node	3
Colon	2
Stomach	2
Kidney	1
Pancreas	1
Heart	1
Brain	1
Skin	1

An autopsy has been performed on 14 of the 29 patients that are known to be dead and having a histological diagnosis of carcinoma of the kidney. In 4 autopsies performed of patients having had a nephrectomy, there was no evidence of neoplastic disease. Two of these patients survived 26 and 27 months following their nephrectomy and died of hypertensive heart disease. The distribution of metastases and the incidence of involvement of various tissues in the remaining 10 cases studied at autopsy are outlined in table 2.

CORRELATION OF OBSERVATIONS

Follow-up information was obtained early in 1958 in regard to the present status of 8 living patients in this series. Thirty-seven patients were known then to be dead. Follow-up studies were incomplete in 2 cases.

The 8 survivors were 98, 58, 49, 44, 44, 41, 80, and 96 months postoperative. Two of these patients had radiological evidence of metastatic pulmonary disease, although they had survived 98 months and 44 months.

A favorable prognosis as seen in these 8 patients could not be correlated with age, sex, race, size of the mass, ulceration of the pelvis, extension through the capsule, histological grade, association with renal calculi, hemorrhage, or necrosis. The presence of gross areas of calcification in the cut sections of the neoplasm was mentioned in 6 cases. Three of the patients with this gross finding were alive and had an average survival of 63 months at time of follow-up. Areas of necrosis and leukocytic response were considered to be a manifestation of local areas of circulatory embarrassment and not a unique feature of response of the host to the neoplasm. The presence of metastases when first seen is an unfavorable prognostic sign. Demonstration of vascular invasion has sinister significance but should not be construed as a hopeless sign as demonstrated by the findings of vascular invasion in 3 patients who survived an average of 58 months following nephrectomy. In 2 of these cases there was gross involvement of the renal vein which was confirmed by microscopic sectioning. This correlation has been referred to by McDonald,[4] Lucké,[3] and others.

Of the 8 living patients, 4 had neoplasms composed of clear cells and 4 were of the mixed, clear, and granular cell variety. When the average survival of all 39 patients was calculated from the date

of histological diagnosis to the date of death or until the date of this study, the average survival for the clear and granular cell mixed type was shown to be 40 months. The average survival for cases of clear cell type was 20 months, and the survival for those with a granular cell type carcinoma was 8.4 months. This observation confirms the report of Foot[1] that clear cell carcinomas behave more favorably. Grading of carcinoma of the renal cortex is impractical. Five of the living patients were graded as grade III, 1 as grade I, and 2 as grade II.

SUMMARY AND CONCLUSIONS

A review of the pathology of 47 cases of carcinoma of the renal cortex indicates that this is one of the most treacherous neoplasms encountered in human pathology. Surgical specimens and/or autopsy studies were reviewed in 39 cases in which material was available. The most common histological type of carcinoma observed was the clear cell type. Hemorrhage, necrosis, size of the mass, or position of the tumor within the kidney could not be correlated with survival. The grade of the tumor could not be used as an indication of biological course of the neoplasm. Factors demonstrated to indicate a more favorable prognosis were absence of vein invasion and a histological type composed entirely or predominantly of clear cells.

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ABSTRACT OF DISCUSSION

DR. CHARLES A. HOOKS, Galveston: Dr. Childers' analysis is done with characteristic thoroughness and attention to detail. His conclusion that clear cell renal cortical tumors offer better prognosis should be generally accepted although some reports have indicated that the histologic appearance does not affect survival rates. The observation that vascular invasion need not be construed as hopeless is stimulating, for perhaps improved sugical techniques may render this more significant.

We are sometimes disappointed to find massive venous emboli even though the tumor mass may be relatively small. Occurrence of metastatic lesions is unpredictable and may indeed be the only clue to presence of a renal neoplasm regardless of its size. In the pyelogram of 1 case there was a suggestive deformity of the lower calyx of the left kidney. The exposed organ looked grossly normal, and incision of the lower pole was necessary to disclose the small tumor. We thought the prognosis good, but within 2 to 3 months pulmonary metastases were obvious and the patient died shortly thereafter. In another patient, a flank mass was known to be present for 7 years prior to urographic demonstration of a renal tumor. Nephrectomy was done. The specimen, a clear cell carcinoma, weighed 1,770 Gm. Thirty-three months later there was still no evidence of recurrence or metastases. Unfortunately, this patient was lost to subsequent follow-up.

The over-all clinical picture remains a gloomy one despite recognition of some favorable prognostic signs. Preoperative diagnostic methods are as yet imperfect, and overt evidence of a renal neoplasm is often too long delayed. Even when a lesion is discovered, the unpredictable behavior is frequently frustrating for those who attempt to control and eradicate it. However, it seems likely that conclusions drawn from well screened data in tumor clinics may provide the clinician with more effective means for control of these treacherous neoplasms.

Ureteral Colic

ABEL J. LEADER, M.D.

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THE PATIENT who develops a colic due to the passage of a stone from the kidney into the ureter is usually a man from 20 to 50 years of age who has been in good health previously. The suddenness of the attack and the severe pain that results from hyperperistalsis, spasm, and stretching of the ureter and pelvis above the point of obstruction by the stone may be of such intensity that the patient is prostrated. His condition may approximate a state of mild shock. The patient or the relatives who bring him to the physician are insistent in their demands for immediate relief from the pain. In the great majority of cases, the physician is able to provide effective symptomatic relief by the administration of morphine or some less spasmogenic narcotic such as Demerol. Recurrence of the pain in the immediate period after the patient first comes to the doctor or is first hospitalized may require additional doses of the narcotic as well as of atropine, possibly in increased dosage.

Possibly as a result in the change of the polarity of the stone within the ureter, releasing the renal blockade to some extent, the pain diminishes or disappears. It is possible for the stone to pass spontaneously into the bladder at this time. It is also possible that although the stone makes no appreciable progress in its downward course, the pain will subside because of the reduced excretion of urine

by the blocked kidney, so that there is an accommodation of the renal collecting system to the increased hydrostatic pressure which now levels off.

Recovery of the stone in the voided urine, which should be strained routinely after an attack of ureteral colic, eliminates the patient's immediate problem. Even so, it is always well to order an excretory pyelographic study before the patient is discharged, since there exists the very real possibility that he is harboring additional renal or ureteral calculi. In such event, another attack of colic may be anticipated and will come as no surprise either to the patient or to the physician. The identification of etiological factors responsible for the formation of the stone is an added benefit that may accrue from this study. If eliminated, recurrence of stone formation and progressive renal destruction may be avoided. This study therefore must not be omitted. Most often, the patient will require no additional care and may be dismissed with such advice as may be thought helpful in prophylaxis against recurrence.

SUBSTANTIATION OF DIAGNOSIS

When the diagnosis of ureteral colic is made clinically and the pain persists or increases, or if the patient develops a temperature elevation, additional measures are necessary. Of primary importance is the substantiation of the diagnosis, since many acute pathological intra-abdominal processes may be manifested by symptoms simulating those of ureteral colic. Examination of the urine is of some help, since only rarely does the stone produce a blockade of such high degree that red blood cells do not appear in the voided or catheterized urine. There is, however, no single investigative procedure which approximates the value of the excretory pyelogram in establishing the diagnosis beyond doubt.

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Management of the patient with ureteral colic due to calculus involves three steps: (1) Immediate relief of pain usually can be achieved by Demerol and atropine. (2) Diagnosis can be verified by excretory urography, which also gives information about size, location, and degree of renal blockade. (3) Treatment may merely encourage spontaneous passing of the stone or may require ureterolithotomy.

Reliance on the abdominal scout film for diagnosis is unwise, for it is of restricted usefulness. From 3 to 5 per cent of all ureteral calculi are composed of urates, and as such cast no shadow on the x-ray film. Many more stones are of such slight calcific density that they, too, cannot be identified. Most radiologists acknowledge that as many as 25 per cent of all ureteral stones may be missed if one has only the abdominal scout film to rely upon. The excretory urogram overcomes such handicaps and will demonstrate the degree of obstruction and the level of the block even though the stone itself casts no discrete shadow. Two points with respect to this study are worth special emphasis in connection with its use in the diagnosis of ureteral calculus colic. The first is that the procedure can and should be used as an emergency procedure at the time its usefulness first becomes apparent. Although the symptoms in both patients simulated those of ureteral stone colic, normal excretory urograms obtained immediately after admission to the hospital brought 2 patients with dissecting aortic aneurysms to the operating table hours sooner than might have been possible otherwise.

In general, the quality of the films is usually excellent and permits a positive diagnosis in the great majority of cases.

The second point to be emphasized in connection with the use of emergency excretory urograms in this condition is that although the conventional series of films may not delineate either the stone or the renal collecting system of the involved side, "delayed films" taken at the end of 1, 2, 4, or more hours after the injection of the contrast substance usually will accomplish these objectives. It has been a common experience with me that although the last film in the conventional series (usually taken 30 minutes after the injection of the contrast substance) has permitted oniy the diagnosis of a "nonfunctioning kidney," at the end of 1 or more hours a progressive opacification of the involved kidney becomes apparent, resulting from the increasing collection of the organic iodide in the renal tubules (usually referred to as a "nephrogram"). With the further passage of time, the dilated pelvis and calyces come into view, and the dye begins to filter down into the ureter, becoming admixed with the retained urine in that structure.

Delayed films taken as long as 24 to 36 hours after the intravenous injection of the contrast substance which show the degree of obstruction, the level of the block, and the nature of the blocking agent are not rare, and the value of such films should be borne in mind. They may be of considerable value in determining the patient's course of management. At any event, such films will result in a marked reduction in the number of times that a diagnosis of "nonfunctioning kidney" remains valid.

MANAGEMENT

In the study of the roentgenograms, identification of the stone and its size and location are important elements to be considered. A stone of small size, usually 0.5 cm. or less in its greatest diameter, and located in the lower third of the ureter which is causing only a moderate degree of obstruction may be expected to pass into the bladder spontaneously. Sufficient time should be allowed for this to happen, especially if the patient can be kept comfortable and if he remains afebrile. Usually, only supportive treatment is indicated in such cases. The patient is treated with adequate doses of narcotics, exercise, antispasmodics, and overhydration. Most often, after the initial attack of pain has subsided, the patient will require only minimal amounts of narcotics, if any.

Calculi of small size located in the upper and mid-thirds of the ureter also may be treated with such watchful expectancy when the degree of obstruction as demonstrated by the excretory urogram is minimal, the pain mild or absent, and the patient free of fever. But should the patient develop chills and fever, indicating suppurative pyelonephritis and septicemia, more aggressive treatment is indicated, even if the stone appears to be small enough to pass into the bladder eventually without difficulty. The passage of ureteral catheters beyond the level of the stone to effect drainage of the involved kidney should not be too long delayed. In the presence of severe infection, failure to by-pass the stone usually makes immediate surgery mandatory. Such surgery may be directed at the removal of the offending calculus, or may have as its purpose the diversion of retained infected urine under pressure by either pyelostomy or nephrostomy.

As a general rule, stones of a size larger than 1 cm. in greatest diameter are best managed by ureterolithotomy. This is especially true when the degree of obstruction is severe, when pain is persistent, and when it becomes apparent that the kidney is endangered by the development of a spiking or "uroseptic" type of fever. Here again, if for some reason immediate surgery is neither advisable nor feasible, drainage of the blocked kidney by cystoscopically placed indwelling ureteral catheters may serve a useful purpose. In addition, such catheters also serve to dilate the ureter, permitting an easier spontaneous passage of the stone into the bladder after their removal some 48 to 72 hours or more after the temperature of the patient has returned to normal. If possible, at least 2 catheters should be used to by-pass the calculus: even if the lumens of both catheters become blocked subsequent to their placement, the urine can still drain into the bladder around the entwined catheters. As stated above, failure to by-pass the stone with ureteral catheters commits the surgeon to immediate ureterolithotomy, since the unsuccessful cystoscopic manipulation is not without its real dangers in introducing infection via the ureteral lymphatics into a kidney already seriously compromised.

Although many large stones will pass eventually into the bladder from the lower third of the ureter, the anatomic narrowings of the ureter in this region may delay this for a considerable time at the expense of prolonged physical disability and economic hardship for the patient. The surgical removal of these stones is therefore warranted on such grounds in many cases. Rapid convalescence without complications is the rule in such event, and makes it the treatment of choice.

Some urologists develop a high degree of facility with cystoscopic instruments devised to extract ureteral calculi from the lower third of the ureter. Even the more enthusiastic of such urologists are unanimous in their agreement that the extraction of calculi from the upper and mid-thirds of the ureter is attended by too many dangers and complications to justify such instrumentation. Since the ureter in these regions is almost devoid of attachments, the degree of force necessary to bring a stone down in a basket, spiral, or loop catheter extractor may readily result in a severance of the ureter. Such was the case in 1 patient with a stone in the mid-third of the ureter subjected to basket extraction by a resident on one of the indigent urological services. Not only did the basket instrument remove the stone, but a 10 cm. length of the inverted ureter as well. Such an accident constitutes a major disaster and sooner or later requires the removal of the kidney on that side. In a recent review of 456 patients admitted to the Baylor Affiliated Hospitals in a 3 year period with ureteral calculous colic, it was found that the cystoscopic manipulation and extraction of ureteral calculi from the lower third of the ureter, whether successful or not, was attended by an 18.9 per cent incidence of major complications. The calculated incidence of complications attendant upon the attempted extraction of stones from the middle and lower thirds of the ureter was 24 per cent.[1] Such complications included ureteral rupture, postoperative pyelonephritis, strictures of the ureter, subsequent nephrectomy, pulmonary embolism, and the incarceration of the extractor necessitating its removal by ureterotomy. At the very least, it is evident from this high rate of complications that the procedure of cystoscopic manipulation and extraction of ureteral calculi is not one for novices. In the light of equivalent experiences, it is interesting to speculate on how many urologists would willingly submit

themselves to such a procedure in preference to some alternate method of management for their ureteral calculus.

SUMMARY

The management of the patient with ureteral colic due to calculus is concerned with (1) the immediate relief of pain, (2) the establishment of the diagnosis by excretory urography, and (3) the definitive treatment, which is directed at the removal of the offending calculus.

For the relief of pain, the administration of narcotics together with atropine will usually suffice. The synthetic narcotics such as Demerol are preferable to morphine and other opium derivatives because they lack the spasmogenic properties of the latter.

The diagnosis may be substantiated by excretory urography, and one should not hesitate to employ this as an emergency study without prior preparation of the patient. Even a negative study is of value, since it rules out ureteral stone colic as the cause of symptoms which may be due to a major intra-abdominal catastrophe and for which operative intervention is immediately imperative. Delayed films, taken at intervals of 1, 2, or more hours after completion of the conventionally timed series of pyelograms will furnish valuable information concerning the size, location, and degree of renal blockade produced by the stone. Such information is indispensable to the physician in his planning of the definitive therapy.

Stones of small size may be expected to pass spontaneously into the bladder to be subsequently voided without discomfort by the patient. For such cases, only supportive therapy is indicated, and consists of narcotics in dosage adequate to control pain, overhydration, antispasmodics, and exercise. Stones of larger size that become arrested in their descent by one of the anatomic narrowings of the ureter or which cause persistent pain and severe obstruction of the kidney above are best removed by ureterolithotomy. This is especially true if the stones are located in the upper two-thirds of the ureter. It is a common experience that even large stones will eventually pass into the bladder from the lower third of the ureter if sufficient patience is exercised. Economic factors and continued physical disability may make the surgical removal of such stones advisable, since the convalescence from such surgery is usually bland and devoid of complications.

In the presence of sepsis, more aggressive action is usually required. By-passing the stone with one or more ureteral catheters introduced cystoscopically will avoid the immediate necessity for surgical intervention, since it will drain the blocked kidney and prevent further renal damage. In addition, such catheters will act to dilate the ureter, permitting the spontaneous passage of the stone after the catheters are removed.

The cystoscopic manipulation and extraction of ureteral calculi is attended by a high incidence of complications that seriously limits the value of the procedure in the hands of most urologists. The procedure is not adaptable to the management of stones in the ureter at levels higher than the pelvic brim, nor is it a procedure for the occasional operator.

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Radical Mastectomy?

Review of 130 Cases

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CANCER OF THE BREAST remains one of the most baffling and devastating diseases with which the medical profession is confronted today. In the 60 years that have elapsed since Halsted and Willy Meyer established the definitive surgical attack by radical mastectomy this treatment has been weighed in the balance and too often found wanting. And in the 15 year period that spans the rise of the American Cancer Society the widespread publicity devoted to the idea of early diagnosis has had time to bear fruit which can hardly be referred to as abundant or outstanding.

Disturbing doubts have been raised as to whether or not the radical operation is ever indicated, and we find McWhirter[8] presenting rather convincing evidence that the results of simple removal of the breast followed by irradiation of the axillary lymph nodes compare favorably with those achieved by the Halsted operation. Deaton[3] in a review of 808 patients treated by simple mastectomy found the 5 year survival rate to be 5 per cent higher than that following radical mastectomy. In a series of 142 cases reported by Meyer and Smith[9] it was 8 per

cent higher. Park and Lees[10] summarized an exhaustive article on "Absolute Curability of Cancer of the Breast":

a. It has not been proved that the survival rate of cancer of the breast, using the 5 year survival rate as an index, is affected by treatment at all.

b. The evidence strongly suggests that treatment is quite ineffectual in reducing the incidence of death from metastatic spread.

c. If treatment is in any way effective, the effectiveness cannot be greater than that required to increase the overall 5 year survival rate by more than 5 to 10 per cent.

Crile[2] in a thought provoking article leans heavily on the doctrine of biological predeterminism, that is, the resistance of the host and the aggressiveness of the tumor, as having more to do with survival than any method of treatment yet devised. He advances the idea that radical surgery—or any surgery—may disseminate the malignant elements and so cut short a life that might, if left to the benign influences of the "vis medicatrix naturae," have been active and useful for months or years longer.

Approach to the cancer problem has been based on the assumption that cancer in its beginnings is for a time a local disease—a small tumor, removal of which results in cure. Sooner or later this growth invades the lymph channels setting up branch establishments first in the regional nodes and ultimately in remote organs of the body. So we thought, and in the absence of demonstrable distant metastasis we have advised routinely radical mastectomy in the hope that we could intercept the advance of wild cells before they had penetrated the cordon of axillary lymphatics.

Experience has shown that the picture is not so simple as that. Cancer of the breast spreads also by the blood stream, and this spread, whether by blood vessels or by lymphatic channels, may take place long before the lump in the breast becomes apparent to patient or doctor. Too often we are licked from the start, and the tragedy of the situation is that in our present state of ignorance we have no means of knowing—in such a case—the futility of any treatment.

More and more we fall back on the principle of biological predeterminism first enunciated by Ian McDonald:[6] ". . . the outcome of the preclinical struggle for power, between a developing neoplasm and the enigmatic defensive reactions of the host, is of greater prognostic importance than the time or type of treatment." Applied to cancer of the breast, predeterminism means that "for every 100 patients about 20 will present dilatory lesions still limited to the breast three or more years after onset; some 55 will have developed distant dissemination in the occult or preclinical phase; in 25 there is a sequential time-space relationship, and for these women prompt diagnosis and treatment may be life saving."

We come then to the question, "Is radical amputation of the breast worth the trouble?" Shall we advise this patient who trusts us to undergo a 3 or 4 hour mutilating ordeal which we have no assurance will effect a cure? If cure is illusory and uncertain, will radical surgery make matters worse and hasten the inevitable?

After much thought and soul searching the answer, as I see it, is this: The lump in the breast diagnosed by the pathologist as carcinoma may be already out of bounds or it may not. If we assume that fortuitously metastasis has not yet occurred, the wide surgical excision that is radical mastectomy offers the one best chance of extirpation of the disease. As such it is worth while. To quote McDonald again,[6] "all of these ordinarily lethal forms of cancer include some fraction in which the struggle between host and neoplasm has eventuated in confinement of the invader to an anatomic beachhead, from which it may be dislodged permanently by a single, sweeping *tour de force*" (such as radical mastectomy). This fraction he estimates (above) may be under the best of circumstances as much as 45 per cent. The possibility that regional and distant spread may be already under way or that surgery will disseminate cell implants is a calculated risk. It behooves us as surgeons to minimize this risk of indulging in a futile and expensive surgical exercise by the thoughtful application to each individual case of certain criteria of operability so well outlined by J. J. McDonald, Haagensen, and Stout.[7] In brief cancer of the breast is operable unless there is evidence of:

1. Edema of the skin—extensive—more than one-third of breast.
2. Satellite nodules in the skin of the breast.
3. Inflammatory carcinoma.
4. Any two or more of the following:
   a. Ulceration of skin.
   b. Edema of skin (less than one-third of skin over breast).

Dr. T. H. Thomason, a practicing surgeon, presented this paper for the Texas Surgical Society in Galveston, October 6, 1958.

A survey of literature on carcinoma of the breast plus a review of 130 cases treated surgically leads to the conclusion that breast cancer without clinical evidence of regional lymphatic involvement or distant spread should be treated by radical mastectomy. Other lesions should be critically studied before treatment, and surgery, irradiation, and hormone therapy used if indicated.

c. Fixation of tumor to chest wall.
d. Axillary nodes of 2.5 cm. or more in diameter.
e. Fixation of axillary nodes to skin or deeper structures.

5. Edema of the arm.
6. Metastasis to supraclavicular nodes.
7. Metastasis to internal mammary nodes.
8. Skeletal metastasis or pain suggestive of such in back or pelvis.
9. Metastasis to lungs.
10. Enlargement of the liver, suggestive of metastasis.

"Triple biopsy" is offered by McDonald, Haagensen, and Stout[7] to settle the question of operability where suspicion of 6 and 7 (above) exists. It includes biopsy of the primary lesion in the breast, biopsy of the internal mammary nodes in the upper three interspaces, and supraclavicular node dissection. It is indicated in patients in whom there is clinical evidence of axillary metastasis, also in large tumors of the center of the breast, in tumors of the inner half, and in all cases of doubtful operability. Practical support for triple biopsy is found in a discouraging report by Wyatt, Sugarbaker, and Stanton[12] of 104 patients in whom such exploration was carried out. In 32 the internal mammary chain was involved. In 15 only the internal mammary nodes were positive. In more than 50 per cent of medial and subareolar lesions the internal mammary nodes contained tumor, but in less than 15 per cent was there axillary metastasis. The inescapable conclusion, which explains most survival statistics, is that at least one-third of operations by the Halsted method are doomed to failure.

Simple mastectomy—which is not always simple—has long been employed by surgeons in situations not amenable to treatment by the more formidable radical mastectomy. With careful consideration of the criteria of operability outlined previously and with less reluctance to go to the trouble of "triple biopsy" surgeons in future likely will perform more simple mastectomies or settle more often for excision biopsy. As a palliative "social operation" removal of an offensive ulcerating breast may greatly lessen the misery of a hopeless case. Tumors of the inner half of the breast most of which have invaded the internal mammary nodes when first seen might just as well be treated by simple mastectomy (to remove a potentially messy lesion), unless exploration of these nodes demonstrates no evidence of such invasion. Another indication for simple mastectomy is carcinoma in situ, of which this series contains 1 case.

The trend toward the philosophy of McWhirter,[8] who has advocated the treatment of all cases of cancer of the breast by simple mastectomy and irradiation, has probably been stalled by Ackerman[1] in a thorough review of the records of cases treated by Robert McWhirter at the Royal Infirmary of the University of Edinburgh from 1941 to 1947. Of 1,882 patients treated by simple mastectomy followed by irradiation 786 were alive 5 years later. Seven hundred nineteen of these cases were reviewed by Ackerman. A significant observation was the high incidence of persistent lymph node involvement following irradiation. There was much irradiation morbidity which was severe in 47. In 3 cases amputation of the arm was necessary. Ackerman's conclusions were to the effect that simple mastectomy by cutting across the main paths of lymphatic drainage may be more apt to spread cancer cells than is a well planned radical operation, which should remain the standard treatment for operable cancer of the breast. In cases of doubtful operability the McWhirter treatment may be as good or as bad as any other.

REVIEW OF 130 CASES

Man learns best by experience—his own experience. He is impressed more by what he himself has seen and heard than by what someone else has written or described. So it occurs to this reviewer that a critical appraisal of his own results in the treatment of breast cancer might help to crystallize his thinking on this rather fluid subject and perhaps point out the direction of future endeavor.

Records of 130 cases of cancer of the breast treated surgically from 1929 to 1958 were reviewed. Eleven were lost to follow-up, leaving 119 whose careers are known. Of these 59 are living (2 with metastasis) and 60 are dead. Fifty-four died of their disease and 6 of causes not related to it. Twenty-one were operated on less than 5 years ago and of these 4 are dead of cancer. Of 98 who were operated upon 5 or more years ago 42 are living (2 with metastasis) and 56 are dead. This figure is not far from the 45 per cent mentioned by McDonald. The 5 year survival rate was 63.2 per cent. Of the 62 who lived 5 or more years 30 lived on past 10 years, 21 carried on for 15 years, and 9 for more than 20 years. All of these had been subjected to radical mastectomy. Compare these figures with a series of 208 cases similarly treated in the Johns Hopkins Hospital reviewed by Lewison.[5] The 5 year survival rate was 47.9 per cent (stage I, 64.1 per cent and stage II, 31.7 per cent); 29.1 per cent lived 10 years. Survival rate (5 year) for patients without axillary metastasis was 64.1 per cent. Of 48 such patients in my 5 year series of 98, 39 or 81 per cent lived 5 years.

In the total series of 130 here reported the oldest patient was 85 and the youngest 23. The shortest survival time was 5 months and the longest to date 26 years. The 3 patients having cancer in both breasts (separate tumors?) at operation died within 3 years. Cancer of the remaining breast occurred in

5, of whom 3 survived 5 plus years with 2 now living. Malignancy involving other organs showed up in 9, of whom 1 had lost both breasts from carcinoma. Lesions of the inner half were noted in 21; of the 10 dead 2 succumbed to unrelated disease. Exploration of the internal mammary chain in the second interspace was performed in 3 medially placed lesions. In none was tumor found, and the subsequent course of these patients has been in keeping with this negative finding. Pregnancy subsequently occurred in 4 patients, 2 of whom had therapeutic hysterotomies and remain well. The youngest patient in the series had 2 children after 5 years and is well in her twelfth year. The fourth elected to have her baby and has just completed that chore uneventfully.

Simple mastectomy was performed on 12 patients: 3 for large medially placed lesions, 7 for inoperable or ulcerating tumors and advanced age, and 2 for lowgrade lesions—carcinoma in situ and intraductal stage 1 cancer.

Patients were classified according to pathology into stage I (tumor confined to the breast), stage II (moderate involvement of the axilla), and stage III (extensive involvement of the axilla, large medial lesions, lesions involving the skin, cancer in both breasts at original operation, and inflammatory carcinoma). Of 119 cases followed 54 were in stage I (17 dead), 43 were in stage II (29 dead), and 22 were in stage III (14 dead).

Local recurrence was noted in 9. In 7 of these it was part of the picture of general metastasis. In 2 the recurrent growth was excised one or more times, and both remain well and vigorous after more than 20 years.

Minimal swelling of the arm happened more often than not, but was never painful or disabling. It has seemed less apt to happen in patients having a transverse incision.

In retrospect many of the patients who died less than 5 years after operation were of very doubtful operability and might have done as well or better under other than radical surgical treatment. "Triple biopsy" might have eliminated most of them. But triple biopsy itself is a formidable procedure. Paradoxically enough it would have denied operation to the patient who is still well 23 years after she was first seen with supraclavicular extension. Extensive skin involvement—another of the criteria of inoperability—would have ruled out a patient who lived 11 years. Both of these may be considered examples of the principle of biological predeterminism, that is, indolent tumor opposed by good host resistance. Had the second patient been seen much earlier she might have had a chance to be well. The patient with the shortest survival of the series had a barely detectable thickening that could hardly be called a tumor, but died of extensive local and general metastasis in 5 months. Clinically operable, she had long since lost the fight, and her end was undoubtedly hastened by well intentioned but futile therapeutic effort.

CONCLUSIONS

> Myself when young did eagerly frequent
> Doctor and Saint, and heard great argument
> About it and about: but evermore
> Came out by the same door wherein I went.
> —Omar Khayyam: Rubaiyat.

Carcinoma of the breast without clinical evidence of regional lymphatic involvement or distant spread should be treated by radical mastectomy. It offers the only chance of eradicating the cancer. It is perhaps less likely to disseminate malignant implants than is simple mastectomy. Where extension to the axilla is apparent on first examination and in lesions of the inner half, biopsy of the supraclavicular or of the internal mammary lymphatics may demonstrate the futility of the radical operation. For practical purposes exploration of the internal mammary lymphatics in the second interspace is adequate, since tumor is present in this area in most of those cases where involvement of any part of the internal mammary chain has been demonstrated.[4, 11]

Lesions of doubtful operability should be carefully and critically studied before being subjected to axillary dissection and removal of pectoral muscles. The "social operation" is commendable. Irradiation and hormone therapy may be of much comfort.

Malignancy in both breasts at original surgery is not likely to be helped by radical mastectomy.

Prophylactic removal of the other breast is not indicated. The patient is just as apt to develop cancer in some other organ, and much more apt to die of her original tumor than to get it in the other breast.

Prophylactic removal of the ovaries to defer possible recurrence was not tried in any of the cases reported here. In my opinion it is a gesture of defeat, adds to the misery, and cures nothing.

Pregnancy following radical mastectomy is not to be encouraged but need not be fatal. If the cancer has been removed, it will not bring on a new one; it can revive one that has been temporarily suppressed.

Local recurrence (6 per cent in most series) does not occur often enough in operable cases to justify too zealous removal of skin of chest wall or axilla. The tumor is much more apt to hit back in remote areas such as the spine.

Adrenalectomy and hypophysectomy are experiments which have their place in the investigative

efforts of research institutions, but are of doubtful value in private surgical practice. Why compound the misery?

Irradiation is in itself a major operation—expensive, wearing, and sometimes painful and disabling. It should rarely be used after a properly planned radical mastectomy. It is invaluable in the treatment of metastasis to bone. It is of little help where there is metastasis to the liver or the brain.

"The challenge to surgeons is to preserve the good of prompt and radical surgery, to use it where it is effective, and to find a way to avoid operations that are useless and do nothing but harm."[2]

SUMMARY

An attempt has been made to erase the question mark that has been attached to radical mastectomy. Results of surgical treatment of 130 cases of breast cancer have been reviewed. Nothing has been said about the management of situations to which surgery for other than diagnostic purposes is not applicable. Here in the supporting role of the good physician we must stand by to aid and comfort, reflecting on the words of the prophet Isaiah: ". . . a man shall be as an hiding place from the wind, and a covert from the tempest; as rivers of water in a dry place, as the shadow of a great rock in a weary land."

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Emergency Management of The Severely Traumatized Patient

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THE PRINCIPLES of treatment of the severely traumatized patient are well known to the practicing physician. However, to review a schedule of these rules is useful.

The management of the severely injured begins when the ambulance attendant arrives at the scene of the accident. The first-aid man should relieve anoxia and splint the victim's fractures. Treatment is continued at a hospital by the physician with evaluation of the state of the head, thorax, abdomen, and pelvis. The examination of the neuromusculoskeletal system follows. Movement of the patient should be minimized. Anoxia and other conditions disturbing the general physiologic state of the patient must be treated first.

FIRST AID

The emergency treatment of the severely traumatized patient starts at the time that the person is picked up by the ambulance attendant. When the patient is seen, first in order is to restore an airway and give artificial respiration. Pulling the victim's tongue out of his throat may save his life. Nursing the patient on his side and sucking out secretions can alleviate anoxia. Oxygen in many instances should be given. Bleeding should be stopped by the application of pressure dressings to open wounds. To prevent further shock and to help prevent fat embolism the person should be splinted where he lies. This, of course, is cliché but is frequently not done. The axial skeleton can be splinted by carrying the patient on a firm surface. The upper arm and shoulder girdle are adequately immobilized by the application of a sling and swathe. A folded newspaper, a board well padded, or similar device can immobilize the forearm and hand. A Thomas splint

or modification thereof is best to immobilize the thigh, but a padded board is better than nothing. The leg and foot can be immobilized with padded aluminum splints, padded Kramer wire, or pillow splint.

The relief of pain by ambulance drivers through the use of opiates is dangerous. The administration of opiates in the presence of head or abdominal injury may obfuscate the diagnosis and depress respiration. In cases of cardiopulmonary injury or in maxillofacial and neck injuries where anoxia is present this anoxia may be aggravated by the use of morphine. Demerol causes less depression of the respiratory center than morphine. Ideally, the drug should be given intravenously since, if the patient is in shock, when peripheral circulation is restored a delayed reaction from the absorption of the drug from a subcutaneous or intramuscular depot may occur. On the other hand the use of doses of Demerol, intramuscularly, helps to relieve pain and thereby to minimize the degree of shock.

CARE BY PHYSICIAN

The second line in the emergency care of a severely traumatized patient is held by the physician. The victim usually comes under the doctor's care at a hospital. The history is important but usually difficult to obtain. The injured patient who has been in an automobile accident or a witness to the accident can regale the physician with the exact details of how fast the other car was going, whose fault it was; but the information derived is usually of little use in the victim's emergency care. Of importance in the history is to ascertain any past illnesses, particularly diabetes, blood abnormalities, and today, whether or not the patient has recently received any corticosteroids.

The physical examination is of utmost importance.

Dr. Morton H. Leonard, a member of the El Paso Orthopaedic Surgery Group, presented this material for the University of Texas Postgraduate School of Medicine, San Angelo Division, November 17, 1957.

First-aid measures for the severely traumatized patient should relieve anoxia, stop bleeding, and splint fractures. The physician should make a thorough physical examination without causing further trauma. Injuries which have disturbed the patient's general physiologic state must be cared for first; then definitive therapy can be carried out.

I think that the prime principle in the treatment of the severely traumatized patient is "Look and you shall find," or to restate this: "Look *without disturbing* the patient and you shall find."

As a pilot uses his check list prior to take-off, so should the physician automatically have a check list to prevent missing an important sign or symptom under the stress of emergency (table 1).

TABLE 1.—*Check List for Examination of Severely Traumatized Patient.*

1. Vital signs.	9. Chest.
a. Blood pressure.	a. Equal expansion.
b. Pulse.	b. Apex shift.
c. Respiration.	c. Equal breath sounds.
2. Color.	10. Abdomen.
3. State of consciousness.	a. Bowel sounds.
4. Pupils (alcohol, opiates?).	b. Tympany.
5. Ears (blood).	c. Distention.
6. Nose (cerebrospinal-rhinorrhea).	11. Blood in urine on voiding or catheterization.
7. Airway patent.	12. Motion of hands and feet.
8. Trachea in midline.	13. Deep reflexes.
	14. Sensation.

If after this survey it is thought that it can be done without causing further damage, the physician should roll the patient on his side and go over the back for points of local tenderness indicating a possible spinal fracture.

Radiographic study may follow if the patient's condition permits. One must not be in a hurry to get radiograms. It is necessary to treat the patient, not an obvious, sensational injury. Our attention is all too frequently drawn to a dramatic pathologic condition such as a bone sticking out through the skin whereas the patient may have a lethal pathologic condition in the form of a ruptured spleen. The physician must treat the patient and not the injury. First things should be treated first.

Usually bleeding has been stopped by the application of a pressure dressing. However, the combatting of anoxia must be continued. A portion of the syndrome of surgical shock is due to cerebral anoxia. Oxygen should be given, but one must be sure that the oxygen can be utilized. The patient must have a patent airway. Tracheostomy, if there is a maxillofacial injury, often will greatly facilitate care.

When the patient does not respond to the usual antishock therapy, it should be considered that a quart of circulating blood may be lost into the fracture hematoma of a femur. Also, the physician should look for causes of shock other than diminished circulating blood volume: tension pneumothorax, cardiac contusion, and fat embolization. Embolization, particularly fat embolism, can cause shock which does not respond to the usual measures. Pipkin has expressed the belief that the use of 5 per cent alcohol in glucose is of benefit in the prevention and treatment of fat embolism. If fluids are given, one 500

cc. dose should be 5 per cent alcohol in glucose. This should be repeated at 12 hour intervals two or three times.[2]

Other abnormalities of the respiratory system should be corrected. Tension pneumothorax must be alleviated. With the presence of a tension pneumothorax the lungs are compressed, diminishing their functional capacity. Even more important, there is a mediastinal shift with kinking of the great vessels and decreased venous return. These two factors result in anoxia. An impression of a tension pneumothorax can be verified by taking a radiograph with the cassette over the front of the patient and shooting the beam through the mattress.[1] Thoracostomy with underwater seal can be done; or, if urgent, putting a large needle through an anterior interspace, removing the finger from the end of the needle when the patient exhales, replacing it when the patient inhales, should relieve the tension until more definitive measures can be carried out. In the presence of a flail chest, tracheostomy will decrease the dead space and help the patient to breathe. Towel clips spaced around the ribs and held out in balanced traction on a Balkan frame will stabilize the chest. "Patients who are breathing do much better."

Marked tympany or distention of the proximal end of the abdomen may indicate a gastric dilatation which can be proven by a radiograph made through the mattress or stretcher. It is treated by nasogastric suction. Ileus of the bowel following severe trauma, particularly to the back and pelvis, is common. It takes expert knowledge to be sure there is not a concomitant abdominal condition requiring surgery.

In the evaluation of the injured a urinalysis is important. If the patient can void and no gross blood is seen, no immediate danger is present. If he cannot void, it is advisable to try to pass a soft rubber catheter. If it cannot be passed, one should suspect a rupture of the urethra. If the catheter is passed and blood is obtained, a cystogram should be made (fig. 1).

Microscopic blood is frequently found in the urine of the severely traumatized. This hematuria is usually self-limited and probably due to renal anoxia secondary to shock. The phenomenon of microscopic hematuria secondary to trauma is more marked and more frequent in children than in adults.

When injuries which may take life have been treated, attention is turned to the musculoskeletal system. Any covered wounded areas are left concealed, and the parts which are open are examined. The pulses, sensation, motor power, and reflexes should be tested. Peripheral motor innervation can be tested without disturbing the patient. The radial nerve is checked by asking the patient to extend the interphalangeal joint of the thumb. The minor fingers can be extended by the intrinsics, and the ability to extend these digits does not indicate an intact radial nerve. The median nerve is evaluated by asking the patient to oppose the thumb, and the ulnar nerve by testing the intrinsics by holding the metacarpophalangeal joints in extension and asking the patient to extend the interphalangeal joints of the minor fingers. In the lower extremities dorsiflexion of the toes indicates that the peroneal nerve is intact. Flexion of the toes shows that the posterior tibial nerve is working.

The definitive care of compound wounds should be carried out in the operating room at such time as the patient's general condition permits.

Radiographic studies should be useful, not lethal. A severely traumatized person, particularly one with a head injury, should not be thrown on an x-ray table, turned from side to side, and have roentgenograms made from every quarter. Films of the extremities can be obtained with very little moving of the patient. Lateral roentgenograms of the spine can be made without moving the patient. The pelvis, abdomen, and spine can be radiographed in the posteroanterior projection with the patient on the stretcher, the cassette being held in front of the patient (fig. 2).

In the emergency treatment of the badly injured person with open wounds, the question of immunization for tetanus arises. Those people who have had toxoid in the past who do not have multiple, grossly contaminated injuries with much devitalized tissue can be protected by a booster of tetanus toxoid. If there is a marked amount of devitalized tissue and the injury has been incurred in a place where there are likely to have been tetanus spores, the patient should be given antitoxin. Fifteen hundred units is not enough; 5,000 units is the dose. The patient should be protected by an antihistamine given prior to the antitoxin but after skin test. If the patient has not received previous immunization with toxoid,

Fig. 1. Normal cystogram.

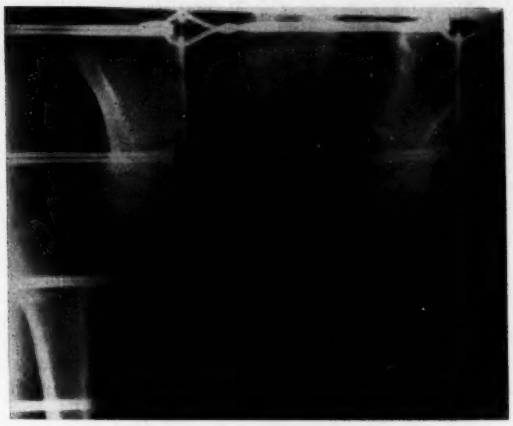

Fig. 2. Radiograph of pelvis made without moving the patient from his bed.

he can be given his first dose of toxoid and his tetanus immunization at one time in different sites of the body. This is important to obviate the necessity of repeated injections of tetanus antitoxin if a reconstructive surgical operation has to be done.

Antitoxin should be given in adequate doses when it is indicated, but should not be given as a routine affair for every simple scratch. A wound incurred where tetanus spores are probably absent, if thoroughly cleansed and left open to the air, is unlikely to give the patient tetanus. On the other hand, the antitoxin is likely to cause a sick patient. Bovine antitoxin can be substituted in those patients who are sensitive to horse serum.

The severely traumatized patient who has open wounds needs the protection of antibiotics. These can be started intramuscularly or intravenously until such time as the patient can take drugs by mouth.

ILLUSTRATIVE CASES

The following examples of care given to severely traumatized persons amplify the preceding.

CASE 1.—This 61 year old white woman was involved in an automobile accident during the early morning hours of November 10, 1953, in a town located about 125 miles from El Paso. The patient arrived in El Paso unsplinted and in poor condition at about 9 a. m. that day.

Survey on admission revealed pinpoint pupils, absence of pulse, and no measurable blood pressure. The skin was cold, clammy, and ashen. Breath sounds were present in both bases; the apex beat was in its proper location. The trachea was not displaced. The proximal end of the abdomen was distended and showed marked tympany. The patient was unable to void and a catheter was passed. Gross blood was found.

The red blood count was 4,700,000 per cubic millimeter with 16 Gm. of hemoglobin per 100 cc. The white blood count was 24,500. The differential blood count showed 92 per cent polymorphonuclears with 80 per cent segmented forms, 2 per cent eosinophils, 4 per cent lymphocytes, and 2 per cent monocytes. The hematocrit was 47 per cent. This indicated marked dehydration and probably plasmapheresis. The patient was in shock.

The blood sample for the preceding study was obtained when the immediate cutdown was done through which the patient was given 2 pints of blood. When the blood pressure had come up to 110/70 it was felt that the source of the genitourinary bleeding must be discovered. Accordingly, through the same catheter originally passed a cystogram was done. This was followed by a retrograde pyelogram which showed that the bleeding came from the right kidney. The roentgenograms made when the retrograde pyelogram was done verified the impression of a gastric dilatation (fig. 3). A nasogastric tube was passed.

It was obvious that the patient's left arm and forearm were fractured. The pulses were satisfactory and the peripheral nerves intact. Nothing more was done than to immobilize the arm and forearm with a posterior molded splint made of a well padded plaster and to put the patient to bed.

Later investigation revealed multiple fractured ribs on the left, a fracture of the left humerus, a fracture of both bones of the left forearm, and a diaphragmatic hernia.

It was more than a month before it was possible to operate on the patient's forearm. Operation on the humerus was performed on December 29, 1953.

This patient was last seen in March, 1956, complaining of the screws which had been used to fasten the bone graft to her radius. She was in good health.

If this patient's gastric dilatation had not been relieved and if an immediate attempt had been made to reduce the fractures of her left upper extremity, I do not believe that she would have been alive in March, 1956.

CASE 2.—This 33 year old woman was in an automobile accident on the morning of July 28, 1957, in a town 85 miles from El Paso. She was hospitalized at that community

Fig. 3. Case 1. Gastric dilatation and deformity of the pelvis of the right kidney.

and was then transferred to El Paso, where she arrived shortly after midnight July 29. The patient's condition on arrival was believed to be satisfactory. She complained of marked pain in her chest, but a roentgenogram of her chest which had been made at the time of her first hospitalization showed no evidence of parenchymal damage, although a fracture through the body and pedicles of the eleventh thoracic vertebra with avulsion of the root of the eleventh rib on the left was noted (fig. 4). With the injury to the root of the eleventh rib on the left, it was thought that a repeat roentgenogram should be made. This radiograph, made on July 30, showed a hemothorax (fig. 5). Accordingly, a thoracostomy was done, and the patient's severely comminuted fracture of the left ankle was treated by applying a pin through the heel with the patient under local anesthesia and putting the limb in traction. The original plan had been to open the ankle.

Fig. 4. Case 2. The body and pedicles of the eleventh thoracic vertebra are split, and the root of the eleventh rib on the left is avulsed (July 28, 1957).

Fig. 5. Case 2. Posteroanterior roentgenogram of the chest made July 30, 1957, showing hemothorax on the left.

Most fractures are not emergencies. The patient's general condition should be treated first.

CASE 3.—A 64 year old man with nephritis was struck by an automobile on February 18, 1953. The man sustained a severe laceration of the left frontal region, bilateral compound fractures of both bones of the legs, and a marked avulsion of the skin on the dorsum of the right forearm. On admission to the hospital he was pulseless. The red blood count was 3,000,000 with 10 Gm. of hemoglobin. The hematocrit was 30 per cent. Urinalysis showed a 3 plus albumin, 3 plus sugar, 5 to 10 white blood cells, 5 to 180 red blood cells per high powered field, and granular casts.

Upon admission no radiographs were made. Rather the patient was examined, administration of oxygen and plasma was started, and the legs were splinted. Demerol was given. The patient received 1 unit of plasma and 3 pints of blood.

The man was admitted to the hospital at 5 p.m. By 9 p.m. we thought that we could radiograph his legs, and by 10 p.m. that evening his condition was satisfactory enough to cleanse and close the leg wounds with the patient under a low spinal anesthetic. The legs were then put in traction. If the lapse in time between the injury and closure of the leg wounds had been longer, secondary closure would have been used.

The laceration on the dorsum of the forearm was repaired the following day. The man survived, and we recently treated him for a fracture of his right hip.

There is a balance between the desirability of closing open wounds and the patient's general condition.

CONCLUSIONS

The severely traumatized person frequently will have a sensational injury such as a compound fracture with the bone protruding through the skin. One must make a concerted effort to treat the patient rather than to treat a portion of the patient. Those injuries which have disturbed his general physiologic state must be cared for first. The victim should be handled with gentleness to avoid further trauma. When the general physiologic state is satisfactory, definitive therapy can be carried out.

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♦ Dr. Leonard, 520 Montana Ave., El Paso.

According to Health Information Foundation, at least 94 per cent of all live births in this country now occur in hospitals, and 97 per cent of all births come with a physician in attendance.

New Oral Hypoglycemic Drugs in Diabetes

Clinical Experiences

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LONG HAS THERE BEEN harbored the hope that some day there would be an effective oral therapy for diabetes mellitus. With the advent of insulin in 1921, many attempts have been made to provide this form of treatment by mouth. To date all reported attempts have been unsuccessful from a practical standpoint.[6] The effective oral doses have been many times the subcutaneous dose. Other than parenteral routes, all of the various methods of introduction of insulin have failed of clinical usefulness because of large amounts of insulin required to produce a variable or minimal effect on the blood sugar.

In 1926 Frank and his colleagues[3] reported fully on the hypoglycemic effects of Synthalin A or decamethylendiguanidin, and for a short time this substance was employed in the treatment of diabetes. Because of its suspected toxicity, Synthalin A is not used any more. It was demonstrated in earlier studies that severe liver damage with subsequent depletion of glycogen followed the use of Synthalin A.

As reported by Loubatières,[7] the first observation of the hypoglycemic effects of the sulfonamide derivatives was made by Janbon and his co-workers in 1942. It was found that certain of the patients to whom was administered the isopropyl thiodiazole derivative of sulfanilamide demonstrated the signs and symptoms of hypoglycemia.

As a result of this work, Loubatières began in 1942 to investigate the hypoglycemic effects of the sulfonamide derivatives. He likewise determined that in depancreatized dogs, this manifestation was absent. There followed much clinical and experimental study which was finally climaxed in this country by the commercial introduction of tolbutamide in 1957.

The sulfonylureas have undergone an extensive battery of experimental studies in the past 5 years. The initial studies of the mechanism of the hypoglycemic sulfonamides were instituted by Loubatières, who concluded that there was stimulation of the functional apparatus of the pancreas; thus, these compounds were considered to be pancreatropic in action. In actuality a multitude of conclusions and counter conclusions have been made. In an editorial published in January, 1958, Stadie[11] could conclude only that "the preponderance of evidence supports the pancreatropic hypothesis of the action of arylsulfonylureas . . . As is usual in instances of this sort, one must close with the statement that judgment is reserved until further evidence is available."

The conclusion that this class of drugs is pancreatropic is based primarily on the observations that the sulfonamides will not cause hypoglycemia in the face of complete alloxanization of experimental animals as brought out by Houssay.[5] In addition there is evidence to support another conclusion, that of decreased hepatic output of glucose following the use of tolbutamide as shown by Recant and Fischer.[10] Parodoxically, however, Elrick and Purnell[2] demonstrated that tolbutamide did not increase peripheral uptake of glucose as did insulin. This has also been concluded by other investigators.[4, 8] Thus from the battery of reports it is believed that the sulfonylureas cause an increased uptake of glucose by the liver with an associated decrease in hepatic output, but only in accompaniment with *endogenous* insulin. The methods of determining the degree of insulin-like activity in the plasma are inefficient, and therefore no proof of increased pancreatic function has been demonstrated. This is particularly so in view of the differing character of sulfonamide induced and insulin induced hypoglycemias.

A limited amount of experimental information is available concerning the mechanism of another group of hypoglycemic agents, namely, the diguanides. Under clinical and experimental investigation at the present time is phenethyldiguanide. As previously mentioned, the earliest of this group of compounds was Synthalin A, which is still used in experimental studies. Contrary to the action of insulin, Synthalin

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Chlorpropamide, a sulfonylurea, proved an effective hypoglycemic agent in 6 diabetic patients to whom it was given, without causing notable side effects or pathologically depressing the white blood count. It was not effective in 2 other patients. Phenethyldiguanide (DBI) permitted reduction in amounts of insulin necessary to manage 7 "brittle" diabetic patients, but with a common side effect of nausea.

A does not promote glycogen deposition. There is the formation of lactic acid as a result of anaerobic glycolysis, and Synthalin A will lower the blood sugar level in the depancreatized dog.[3] Phenethyldiguanide has the hypoglycemogenic properties of the diguanidin compounds without proven systemic toxicities. It was not found to cause "significant or durable" depletion of glycogen.[12] In clinical trials Nielsen and co-workers[9] found increased amounts of lactic acid which substantiated the conclusion of increased glycolysis; they also found decreased hepatic output of glucose. Reports of further experimental studies will appear in future literature.

It is therefore the purpose of the present paper to describe preliminary clinical experiences in the treatment of diabetes with two new hypoglycemic drugs, namely, chlorpropamide, a sulfonylurea, and DBI, a phenethyldiguanide.

CHLORPROPAMIDE

Six patients were selected for a trial with chlorpropamide.* These were all persons who had stable diabetes of the adult type and who could not be controlled by dietary management alone. Four patients had demonstrated previously a primary or secondary failure to the administration of tolbutamide. All were treated as outpatients, and laboratory studies, which included white blood counts and true blood glucose levels by the method of Benedict,[1] were performed at varying intervals. Chlorpropamide was administered initially in the dosage of 250 mg. twice daily with subsequent increases in dosage as indicated. It was attempted to maintain control at a postprandial level of blood glucose of 150 mg. per 100 cc. or less. The dose of tolbutamide in all cases prior to the use of chlorpropamide was standard at 500 mg. twice daily. The results obtained from administration of chlorpropamide in this group of patients is shown in table 1.

It can be seen that in all cases satisfactory postprandial control of the patient was obtained with chlorpropamide in varying doses. Two patients, not tabulated, failed to respond satisfactorily. The first was an unstable diabetic who developed ketonuria and glycosuria with chlorpropamide and gradually decreasing amounts of insulin. With the other patient, a 76 year old woman taking 37 units of insulin daily, there was a decrease in the daily requirement of insulin to 27 units, but there was the development of vertigo, staggering, and extreme weakness. These were considered to be side effects of the drug, and chlorpropamide was discontinued. These symptoms gradually disappeared over the succeeding 4 days.

CASE 1.—B.T., a 21 year old mother was discovered to be diabetic with mild acidosis during pregnancy in her twentieth year. Thirty-six units of insulin were required to control the problem for the duration of the pregnancy with a reduction to 12 units following cesarean section. Tolbutamide was substituted for insulin 4 months postpartum, and the response was satisfactory. Tolbutamide was discontinued following the occurrence of an unremitting pharyngitis, and a subsequent level of the blood sugar was satisfactory. Following 2 months of dietary indiscretion, the blood level of glucose was 185 mg. per 100 cc., and 1.0 Gm. of tolbutamide was readministered daily. The response was not considered satisfactory. Chlorpropamide was substituted, and the response is noted in table 1.

TABLE 1.—*Blood Sugar Levels Following Administration of Chlorpropamide.*

Pt.	Age (yr.)	Duration of Disease	Postprandial Levels of Blood Glucose (mg./100 cc.) on Tolbutamide		Chlorpropamide						Dose of Chlorpropamide
					1 wk.	2 wk.	3 wk.	6 wk.	10 wk.	14 wk.	
D.B.	40	10 mo.	145	135	142	165	135	147	97		500 mg./b.i.d.
B.T.	21	15 mo.	162	150	177	175	147	135	122	97	500 mg./b.i.d.
H.C.	64	Just diag.	117	150	132	122	122	117	147	95	500 mg./d.
T.S.	55	4 yr.		160	147	85	160	92	120		500 mg./d.
C.L.	65	5 yr.	170	157	135	110	115	142	132	110	500 mg./d.
S.V.	65	Just diag.	FBS 137	125	140	95					500 mg./d.

Chlorpropamide has been an effective hypoglycemic agent in the 6 patients referred to in table 1. In none of these cases has there been a pathological depression of the white blood count. Likewise there have not been any notable side effects. It may be said in conclusion that chlorpropamide may be substituted for tolbutamide, and the dosage of chlorpropamide is less than that of tolbutamide.

PHENETHYLDIGUANIDE

The patients who were chosen for the initial evaluation of the effects of phenethyldiguanide,* or DBI, were all severe and unstable diabetics. They

Chlorpropamide was obtained through the generosity of Chas. Pfizer & Company, Inc., New York.

Phenethyldiguanide was generously donated by the U. S. Vitamin Corporation, Arlington-Funk Laboratories Division, New York.

would all be classified as having diabetes of the juvenile type and were selected because of the lack of responsiveness of this type of patient to the sulfonylureas. The duration of the disease varied from 8 to 32 years, so that all could be said to have become completely diabetic. The control of all patients were characterized by intermittent gyrations of the blood sugar. These patients were all extremely sensitive to small changes in the dosage of insulin and, with relative ease, could demonstrate hypoglycemia on the one hand and acidotic hyperglycemia on the other.

All 7 patients were hospitalized for the initial phase of this observation and were prescribed a weighed diet between 1,800 and 2,100 calories daily depending upon the need. Qualitative tests of the urine for sugar and acetone were performed and recorded four times daily. Any routine medications were continued. DBI was instituted initially in the oral dose of 75 mg. daily in three divided doses combined with a reduction of the total insulin dosage in daily decrements of 10 per cent. In the first 3 patients the dosage of DBI was increased every other day, but because of the side effects apparently due to the drug, later patients continued to receive the initial dose of DBI for 2 weeks before any increase was administered.

Three case histories follow:

CASE 2.—J. L., a 27 year old brick mason, was found to have diabetes in December, 1950, following a spontaneous and symptomatic onset. The course of the disease was characterized by frequent episodes of hypoglycemia—mild or severe—and the patient had considerable apprehension about the occurrence of insulin reactions late in the afternoon while at work. Moderately well controlled on 50 units of Lente insulin daily, the patient was hospitalized, and DBI was administered in the dose of 75 mg. per day (fig. 1). It can be seen that the daily requirement of insulin decreased to 35 units daily, and at the present time the patient requires only 23 units of insulin to maintain an aglycosuric state. Present total dosage of DBI is 125 mg. daily. Sixty Gm. of extra carbohydrate were added to the diet when the patient complained of extreme weakness on one occasion.

CASE 3.—J. V., a 48 year old restaurant manager, with diabetes mellitus of 23 years' duration, had experienced episodes of hypoglycemia which on one occasion had caused him to be incarcerated as a suspected case of driving while intoxicated. His course in the hospital is depicted in figure 2. The original requirement of Lente insulin was 42 units daily. After 7 days of increasing doses of DBI and decreasing amounts of insulin, the patient experienced "heart burn" followed the next morning by severe nausea, glycosuria, and ketonuria. It was necessary to administer 1,500 cc. of glucose solution and 75 extra units of insulin.

The dosage of DBI was reduced to a total of 75 mg. daily, and 30 units of Lente insulin were given following this episode. After the patient's discharge from the hospital, DBI was gradually increased to 150 mg. per day and then reduced to 100 mg. Course of the case has been uneventful and predominantly aglycosuric with only a few very mild hypoglycemic reactions.

CASE 4.—E. B., a 34 year mother, with 32½ years of diabetes mellitus, had experienced infrequent but severe reactions to insulin. Taking divided amounts of insulin totalling 23 units daily, this patient was hospitalized, and DBI was administered in the total dose of 75 mg. daily accompanied by a gradual reduction of insulin to 15 units daily. Mild nausea experienced in the hospital was relieved by promazine. With gradual increases of DBI to 150 mg. daily, insulin was further reduced to 13 units following discharge from the hospital.

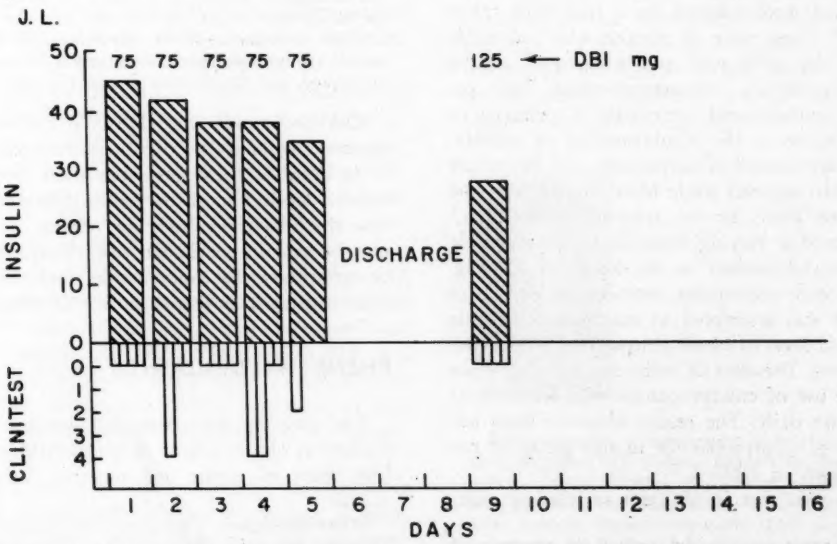

Fig. 1. Chart showing the reduction in requirement of insulin of a patient taking DBI.

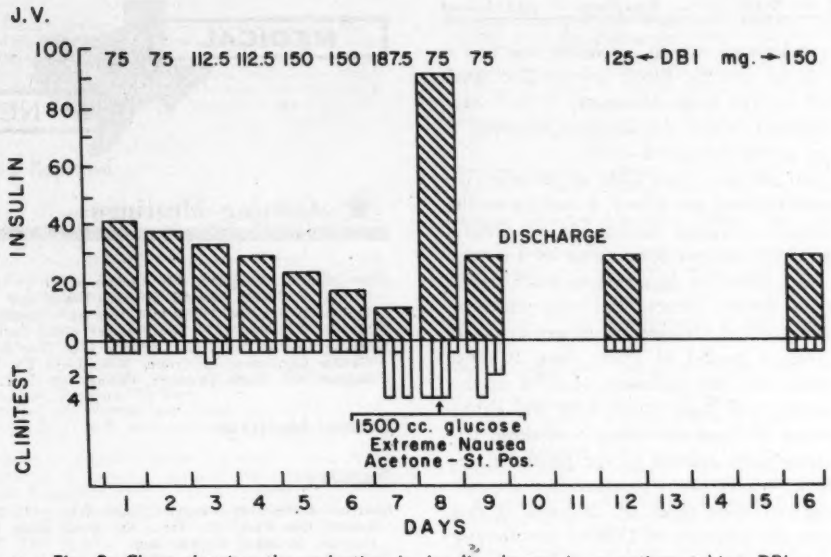

Fig. 2. Chart showing the reduction in insulin dosage in a patient taking DBI.

All of the conclusions and impressions from this preliminary study cannot be expressed in objective terms. There is little question that DBI is a potent hypoglycemic agent. This is shown by figures 1 and 2 as well as by the graph which depicts the changing insulin requirements in all patients (fig. 3). Table 2 shows in addition the percentage of decrease in the dosage of insulin.

The points of increase in insulin dosage, shown in figure 3, are due to ketoacidosis secondary to nausea and/or vomiting.

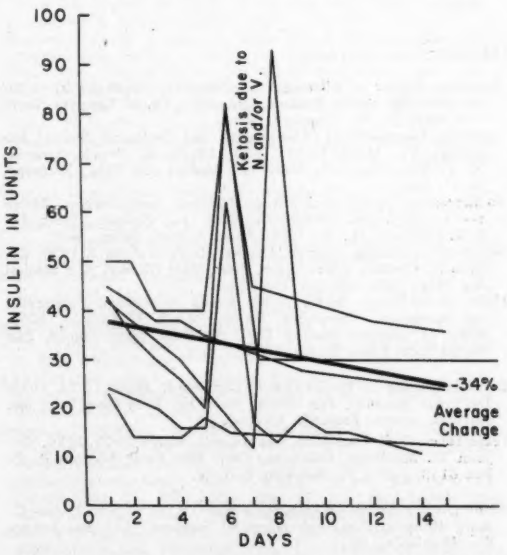

Fig. 3. Comparative doses of insulin required following administration of phenethyldiguanide.

Added to the reduction in amounts of insulin, with DBI the problem of control has been generally less nerve wracking. Although reactions have occurred, these have been very slow in onset with the presence of only mild symptoms. This allows ample time for the ingestion of extra carbohydrate. The level of blood glucose can become very depressed, but the mildness of the symptomatology speaks for the slowness at which this level is reached. Control thus has been smoother and easier to obtain.

The most common side effect of DBI, nausea and/or vomiting, can be partially alleviated by cautious and patient administration and by restrained increases in dosage. Ketonuria occurs readily even with aglycosuria, but its cause is not completely understood. It may be due to the effect of "starvation" or electrolytic changes which, as yet, are unidentified. An increase in ketonuria usually will precede the occurrence of emesis, and on several occasions emesis was initiated by an over-reduction of insulin.

TABLE 2.—*Hypoglycemic Effects of DBI (expressed in percentage of reduction in dosage of insulin).*

Pt.	Initial Insulin (units)	After 2 Weeks Insulin (units)	After 2 Weeks DBI (mg.)	After 2 Weeks % Change	After 4 Weeks Insulin (units)	After 4 Weeks DBI (mg.)	After 4 Weeks % Change
E.B.	23	14	100	—39.0	13	150	—43.0
J.L.	45	26	100	—42.0	23	125	—49.0
T.C.	24	16	75	—33.0	discontinued		
J.V.	42	30	150	—28.0	30	100	—28.0
V.F.	50	38	75	—24.0	38	125	—24.0
P.H.	43	28	75	—35.0	36	100	—16.0

DBI is a substance which probably reaches a peak of action at specific blood levels. The level is unidentified at this time. However, 3 to 5 days are usually required before the ultimate response is reached at any given dosage of DBI.

Finally it can be said that DBI is an effective agent for supplementing the effect of insulin in the care of the "brittle" diabetic patient. At no time is it intended as a replacement for insulin in this type of problem! It is effective in doses as small as 75 mg. per day in divided doses, and care must be exercised in the gradual addition of greater amounts of the drug over a period of many days. It must be kept in mind that the inclusion of DBI in the therapeutic regimen of these cases does not eliminate the necessity of close surveillance of these patients. The laissez-faire attitude of the physician toward the patient, which often characterizes the use of oral therapy in other types of diabetes, is not permissible with the addition of DBI to the therapy of unstable diabetes. Recognizing these factors, the physician has a valuable adjunct to the treatment of "brittle" diabetes.

ADDENDUM

Since this report was submitted, chlorpropamide has been discontinued in 2 patients because of occurrence of dermatitis.

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★ Coming Meetings

Texas Medical Association, San Antonio, April 18-21, 1959 (Conference of County Medical Society Officials and Symposium on Legislation, Jan. 24, 1959). Dr. Howard O. Smith, Pres.; Mr. C. Lincoln Williston, 1801 North Lamar Blvd., Austin, Exec. Secy.

American Medical Association, Atlantic City, June 8-12, 1959. Dr. Gunnar Gundersen, La Crosse, Wis., Pres.; Dr. F. J. L. Blasingame, 535 North Dearborn, Chicago 10, Exec. Vice-Pres.

Current Meetings

FEBRUARY

American Academy of Allergy, Chicago, Feb. 9-11, 1959. Dr. Max Samter, Oak Park, Ill., Pres.; Dr. Bram Rose, Royal Victoria Hospital, Montreal, Canada, Secy.

American College of Radiology, Chicago, Feb. 6-7, 1959. Dr. Vincent W. Archer, Charlottesville, Va., Pres.; Mr. W. C. Stronach, 20 N. Wacker Dr., Chicago 6, Executive Director.

South Central Association of Blood Banks, Austin, February, 1959. Dr. Louis Manhoff, Jr., San Antonio, Pres.; L. Ruth Guy, Ph.D., Room 1101, Stoneleigh Hotel, Dallas, Secy.

Texas Association of Obstetricians and Gynecologists, Fort Worth, Feb. 14, 1959. Dr. Jesson L. Stowe, El Paso, Pres.; Dr. Oran V. Prejean, 1317 N. Washington St., Dallas, Secy.

Texas Proctologic Society, New Orleans, February 28, 1959. Dr. C. P. Hardwicke, Austin, Pres.; Dr. H. Gray Carter, 915 St. Joseph St., Dallas, Secy.

Texas Public Health Association, San Antonio, Feb. 22-25, 1959. Dr. D. R. Reilly, San Angelo, Pres.; Mr. Joseph N. Murphy, Jr., Box 4012, Austin 51, Executive Secy.

First District Society, Fort Stockton, February, 1959. Dr. H. D. Garrett, El Paso, Pres.; Dr. E. S. Crossett, 1501 Arizona St., El Paso, Secy.

MARCH

American College of Allergists, San Francisco, March 15-20, 1959. Dr. Merle W. Moore, Portland, Ore., Pres.; Dr. M. Coleman Harris, 450 Sutter St., San Francisco, Secy.

American Laryngological, Rhinological, and Otological Society, Hot Springs, Va., March 10-12, 1959. Dr. G. D. Hoople, Syracuse, N. Y., Pres.; Dr. C. S. Nash, 708 Medical Arts Bldg., Rochester, N. Y., Secy.

Southwestern Society of Nuclear Medicine, New Orleans, March 14-15, 1959. Dr. Herbert C. Allen, Jr., Houston, Pres.; Dr. J. R. Maxfield, Jr., 2711 Oak Lawn Avenue, Dallas, Secy.

Southwestern Surgical Congress, Denver, March 30-April 2, 1959. Dr. Louis M. Overton, Albuquerque, Pres.; Mary O'Leary, 813 Medical Arts Bldg., Oklahoma City, Exec. Secy.

United States-Mexico Border Public Health Association, Brownsville and Matamoros, Tamaulipas, Mexico, March 30-April 3, 1959. Albert O. Irigoyen, Mexico, D.F., Pres.; Dr. Jorge Román, 243 United States Court House, El Paso, Secy.

Texas Association for Mental Health, Fort Worth, March 12-14, 1959. Dr. Frank Schooner, Fort Worth, Pres.; Mr. John Lane, 2410 San Antonio, Austin, Executive Director.

Texas Tuberculosis Association, San Antonio, March 19-21, 1959. Dr. John W. Middleton, Galveston, Pres.; Miss Pansy Nichols, P. O. Box 6158, Austin 21, Executive Director.

Ninth District Society, Huntsville, March 19, 1959. Dr. Lyman C. Blair, Houston, Pres.; Dr. James H. Sammons, 111 San Jacinto St., Highlands, Secy.

Thirteenth District Society, Wichita Falls, March 7, 1959. Dr. W. R. Sibley, Abilene, Pres.; Dr. R. D. Moreton, 1217 W. Cannon, Fort Worth, Secy.

Dallas Southern Clinical Society, Dallas, March 23-25, 1959. Dr. C. D. Bussey, Dallas, Pres.; Millard J. Heath, 433 Medical Arts Bldg., Dallas 1, Executive Officer.

New Orleans Graduate Medical Assembly, New Orleans, March 2-5, 1959. Dr. Jo Weilbaecher, New Orleans; Pres.; Dr. Maurice E. St. Martin, 1430 Tulane Ave., New Orleans 12, Secy.

National and Regional

American Academy of Dermatology and Syphilology, Chicago, Dec. 5-10, 1959. Dr. A. C. Cipollaro, New York, Pres.; Dr. Stanley E. Huff, 636 Church St., Evanston, Ill., Secy.

American Academy of General Practice, San Francisco, April 6-9, 1959. Dr. Holland T. Jackson, Fort Worth, Pres.; Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Executive Secy.

American Academy of Ophthalmology and Otolaryngology. Dr. Le-Roy A. Schall, Boston, Pres.; Dr. W. L. Benedict, 15 Second St. S.W., Rochester, Minn., Secy.

American Academy of Pediatrics, Chicago, Oct. 20-23, 1959. Dr. Stewart H. Clifford, Brookline, Mass., Pres.; Dr. E. H. Christopherson, 1801 Hinman Ave., Evanston, Ill., Secy.

American Association for Maternal and Infant Health, 1960. Mr. Howard I. Wells, Jr., 116 S. Michigan Ave., Chicago 3, Executive Secy.

American Association for Thoracic Surgery, Los Angeles, April 21-23, 1959. Dr. Michael E. DeBakey, Houston, Pres.; Dr. Hiram T. Langston, 7730 Corondelet Ave., St. Louis 5, Secy.

American Association of Genito-Urinary Surgeons, Absecon, N. J., April 15-17, 1959. Dr. John A. Taylor, New York, Pres.; Dr. W. J. Engel, 2020 E. 93rd St., Cleveland 6, Secy.

American Association of Obstetricians and Gynecologists. Dr. William F. Mengert, Chicago, Pres.; Dr. E. Stewart Taylor, University of Colorado School of Medicine, 4200 E. 9th, Denver, Secy.

American Cancer Society, New York, Oct. 28-29, 1959. Dr. Eugene P. Pendergrass, Philadelphia, Pres.; M. R. Runyon, 521 W. 57th, New York, Executive Vice-Pres.

American College of Chest Physicians, Atlantic City, June 3-7, 1959. Dr. Donald R. McKay, Buffalo, Pres.; Mr. Murray Kornfeld, 112 E. Chestnut, Chicago 11, Executive Secy.

American College of Gastroenterology, Los Angeles, Sept. 20-26, 1959. Dr. Frank L. Borrelli, New York, Pres.; Mr. Daniel Weiss, 33 West 60th, New York 23, Executive Director.

American College of Obstetricians and Gynecologists, Atlantic City, April 5-9, 1959. Dr. R. Glen Craig, San Francisco, Pres.; Dr. John C. Ullery, 15 S. Clark St., Chicago 3, Secy.

American College of Physicians, Chicago, April 20-24, 1959. Dr. Dwight L. Wilbur, San Francisco, Pres.; Mr. E. R. Loveland, 4200 Pine, Philadelphia 4, Secy.

American College of Surgeons, Atlantic City, Sept. 28-Oct. 2, 1959. Dr. Newell W. Philpott, Montreal, Pres.; Dr. Michael L. Mason, 40 E. Erie, Chicago 11, Secy.

American Congress of Physical Medicine and Rehabilitation, Minneapolis, Aug. 30-Sept. 4, 1959. Dr. Donald L. Rose, Kansas City, Kan., Pres.; Frances Baker, One Tilton, San Mateo, Calif., Secy.

American Dermatological Association, Atlantic City, June 1-4, 1959. Dr. J. Lamar Callaway, Durham, N. C., Pres.; Dr. Wiley M. Sams, 25 Southeast 2nd Ave., Miami, Secy.

American Gastroenterological Association, Atlantic City, June 5-6, 1959. Dr. C. J. Barborka, Chicago, Pres.; Dr. F. J. Ingelfinger, 65 E. Newton, Boston 18, Secy.

American Gynecological Society, Hot Springs, Va., May 25-27, 1959. Dr. Lewis C. Scheffey, Philadelphia, Pres.; Dr. A. A. Marchetti, 3800 Reservoir Rd. N.W., Washington 7, D. C., Secy.

American Heart Association. Dr. Robert W. Wilkins, New York, Pres.; Mr. John D. Brundage, 44 E. 23rd, New York 10, Secy.

American Hospital Association, New York, Aug. 24-27, 1959. Mr. Tol Terrell, San Angelo, Pres.; Dr. Edwin L. Crosby, 18 E. Division, Chicago 10, Executive Director.

American Neurological Association, Atlantic City, June 15-17, 1959. Dr. Bernard J. Alpers, Philadelphia, Pres.; Dr. Charles Rupp, 133 S. 36th, Philadelphia 4, Secy.

American Ophthalmological Society, Hot Springs, Va., May 28-30, 1959. Dr. Derrick Vail, Chicago, Pres.; Dr. M. C. Wheeler, 30 W. 59th, New York 19, Secy.

American Orthopaedic Association, Lake Placid, N. Y., June 15-18, 1959. Dr. C. Leslie Mitchell, Detroit, Pres.; Dr. Lee Ramsay Straub, 535 East 70th St., New York 21, Secy.

American Pediatric Society, Buck Hill Falls, Pa., May 6-8, 1959. Dr. Joseph Stokes, Jr., Philadelphia, Pres.; Dr. A. C. McGuinness, Room 1036, 2800 Quebec St., N.W., Washington 8, D. C., Secy.

American Proctologic Society, Atlantic City, June 15-18, 1959. Dr. Karl Zimmerman, Pittsburgh, Pres.; Dr. Norman D. Nigro, 10 Peterboro, Detroit 1, Secy.

American Psychiatric Association, Philadelphia, April 26-May 1, 1959. Dr. Francis J. Gerty, Chicago, Pres.; Dr. C. H. Hardin Branch, 156 Westminister Ave., Salt Lake City, Secy.

American Public Health Association, Atlantic City, Oct. 19-23, 1959. Dr. Leona Baumgartner, New York, Pres.; Dr. Berwyn F. Mattison, 1790 Broadway, New York 19, Executive Secy.

American Society of Anesthesiologists, Bal Harbour, Fla., Oct. 5-9, 1959. Dr. Daniel C. Moore, Seattle, Pres.; Dr. J. E. Remlinger, Jr., 188 W. Randolph, Chicago 1, Secy.

American Society of Clinical Pathologists, Chicago, Sept. 7-11, 1959. Dr. Edward L. Burns, Toledo, Pres.; Dr. Coye C. Mason, 2052 N. Orleans St., Chicago 14, Secy.

American Surgical Association, San Francisco, April 15-17, 1959. Dr. I. S. Ravdin, Philadelphia, Pres.; Dr. William Altemeier, Cincinnati General Hospital, Cincinnati 29, Secy.

American Urological Association, Atlantic City, April 20-23, 1959. Dr. Adolph Kutzmann, Los Angeles, Pres.; Dr. Samuel L. Raines, 188 S. Bellevue Blvd., Memphis, Tenn., Secy.

Association of American Physicians and Surgeons, Fort Worth, April 2-4, 1959. Dr. Mal Rumph, Fort Worth, Pres.; Mr. Harry E. Northam, 185 N. Wabash Ave., Chicago 1, Executive Secy.

International College of Surgeons, U. S. Chapter. Dr. Curtice Rosser, Dallas, Pres.; Dr. Karl Meyer, 1516 Lake Shore Dr., Chicago, Secy.

National Tuberculosis Association, Chicago, May 24-29, 1959. Dr. Mario M. Fischer, New York, Pres.; Mrs. Wallace B. White, 1790 Broadway, New York 19, Secy.

Radiological Society of North America, Chicago, Nov. 15-20, 1959. Dr. Lawrence L. Robbins, Boston, Pres.; Dr. Donald S. Childs, 713 E. Genesee, Syracuse 2, N.Y., Secy.

Southern Medical Association, Atlanta, Ga., Nov. 16-19, 1959. Dr. Milford O. Rouse, Dallas, Pres.; Mr. V. O. Foster, 2601 Highland Avenue, Birmingham 5, Executive Secy.

Southern Psychiatric Assoication. Dr. J. L. Knapp, Dallas, Pres.; Dr. Richard Proctor, Winston-Salem, N. C., Secy.

Southern Surgical Association, Hot Springs, Va., Dec. 8-10, 1959. Dr. George C. Finney, Baltimore, Pres.; Dr. John D. Martin, Jr., Emory University, Ga., Secy.

Southwest Allergy Forum, Houston, April 26-28, 1959. Dr. Richard L. Etter, Houston, Pres.; Dr. Richard H. Jackson, 156 Hermann Professional Building, Houston, Secy.

Southwest Regional Cancer Conference. Dr. O. J. Wollenman, Fort Worth, Chm.; Mrs. Ira Frances Ball, 264 W. 11th, Fort Worth, Secy.

Southwestern Medical Association, Roswell, N. Mex., Oct.-Nov., 1959. Dr. A. R. Clausen, Albuquerque, Pres.; Dr. M. D. Thomas, 1501 Arizona St., 12-D, El Paso, Secy.

Tri-State Medical Assembly. Dr. Jack Guthrie, Camden, Ark., Pres.; Dr. Jason Sanders, Sanders Clinic, Kings Highway, Shreveport, La., Secy.

State

Private Clinics and Hospitals Association of Texas. Dr. Jack S. Maxfield, Dallas, Pres.; Mr. Henry E. Taylor, Medical Arts Building, Dallas, Executive Secy.

Texas Academy of General Practice, Galveston, Oct. 4-7, 1959. Dr. Charles E. Oswalt, Jr., Fort Stockton, Pres.; Mr. Donald C. Jackson, 1905 N. Lamar, Austin, Executive Secy.

Texas Academy of Internal Medicine, San Antonio, Dec. 4-5, 1959. Dr. Merton M. Minter, San Antonio, Pres.; Dr. Hugo T. Engelhardt, 1216 Main, Houston, Secy. Meetings restricted to members.

Texas Air-Medics Association, San Antonio, April, 1959. Dr. R. Henry Harrison, Bryan, Pres.; Dr. C. F. Miller, P. O. Box 1338, Waco, Secy.

Texas Chapter, American Association of Public Health Physicians, San Antonio, April 19, 1959. Dr. David M. Cowgill, San Benito, Pres.; Dr. B. M. Primer, 2709 Rio Grande, Austin.

Texas Chapter, American College of Chest Physicians, San Antonio, April 19, 1959. Dr. J. O. Armstrong, Dallas, Pres.; Dr. Carlos J. Quintanilla,, Box 592, Harlingen, Secy.

Texas Club of Internists. Dr. D. D. Warren, Waco, Pres.; Dr. L. C. Carter, 2600 Procter, Port Arthur, Secy.

Texas Dermatological Society, San Antonio, April 20, 1959. Dr. Earl L. Loftis, Dallas, Pres.; Dr. E. N. Walsh, 1410 Pruitt St., Fort Worth 4, Secy.

Texas Diabetes Association, San Antonio, April 19, 1959. Dr. Merton Minter, San Antonio, Pres.; Dr. Warren W. Moorman, 901 W. Leuda, Fort Worth, Secy.

Texas Division, American Cancer Society, Austin, Dec., 1959. Dr. John A. Wall, Houston, Pres.; Mr. Curt W. Reimann, 5014 Bull Creek Rd., Austin 3, Executive Director.

Texas Heart Association, San Antonio, April 19, 1959. Dr. William B. Adamson, Abilene, Pres.; Ernest T. Guy, 404 Jesse H. Jones Library Bldg., Texas Medical Center, Houston 25, Executive Director.

Texas Hospital Association, Houston, May 11-14, 1959. Mr. W. P. Earngey, Jr., Fort Worth, Pres.; Mr. O. Ray Hurst, 2208 Main, Dallas, Executive Director.

Texas Industrial Medical Association, San Antonio, April 19, 1959. Dr. Wendell H. Hamrick, Houston, Pres.; Dr. Robert A. Wise, Box 2180, Houston, Secy.

Texas Neurophychiatric Association, San Antonio, April 19, 1959. Dr. Samuel R. Snodgrass, Galveston, Pres.; Dr. Clarence S. Hoekstra, 8215 Westchester Drive, Dallas, Secy.

Texas Ophthalmological Association, San Antonio, April 19, 1959. Dr. Harold Beasley, Fort Worth, Pres.; Dr. James Scruggs, 2223 Austin, Waco, Secy.

Texas Orthopedic Association, San Antonio, April 20, 1959. Dr. Louis J. Levy, Fort Worth, Pres.; Dr. Margaret Watkins, 3503 Fairmount, Dallas, Secy.

Texas Pediatric Society, Fort Worth, Houston, 1959. Dr. Bruce A. Knickerbocker, Dallas, Pres.; Dr. James N. Walker, 5216 W. Freeway, Fort Worth, Secy.

Texas Physical Medicine and Rehabilitation Society, San Antonio, April 19, 1959. Dr. Vann S. Taylor, Dallas, Pres.; Dr. Lewis A. Leavitt, Veterans Administration Hospital, Houston, Secy.

Texas Radiological Society, Houston, January, 1960. Dr. Herman C. Sehested, Fort Worth, Pres.; Dr. R. P. O'Bannon, 1216 Pennsylvania, Fort Worth, Secy.

Texas Rheumatism Association, San Antonio, Dec. 4, 1959. Dr. Warren W. Moorman, Fort Worth, Pres.; Dr. J. Morris Horn, 3707 Gaston, Dallas, Secy.

Texas Society of Aging. Mr. Herbert Shore, Dallas, Pres.; Mrs. William B. Ruggles, 3701 Stratford, Dallas, Secy.-Treas.

Texas Society of Anesthesiologists, San Antonio, April 19, 1959. Dr. M. M. Rosenzweig, San Antonio, Pres.; Dr. M. T. Jenkins, Parkland Hospital, Dallas, Secy.

Texas Society of Athletic Team Physicians, San Antonio, April 18, 1959. Dr. Edward T. Smith, Houston, Pres.; Dr. Jack Brannon, 2715 Fannin, Houston, Secy.

Texas Society of Gastroenterologists and Proctologists, San Antonio, April 19, 1959. Dr. O. P. Griffin, 800 5th Avenue, Fort Worth, Pres.; Dr. A. C. Broders, Jr., Scott and White Clinic Hospital, Temple, Secy.

Texas Society of Ophthalmology and Otolaryngology, Fort Worth, Dec. 4-5, 1959. Dr. James T. Robison, Austin, Pres.; Dr. Edwin G. Grafton, 4319 Oak Lawn, Dallas, Secy.

Texas Society of Pathologists. Dr. Jarrett Williams, Abilene, Pres.; Dr. Sylvia Johns, 414 Navarro St., San Antonio, Secy.

Texas Society of Plastic Surgeons, San Antonio, April 18, 1959. Dr. Baron Hardy, Houston, Pres.; Dr. Raymond Brauer, 6615 Travis, Houston, Secy.

Texas Surgical Society, Austin, April 5-7, 1959. Dr. Albert Hartman, San Antonio, Pres.; Dr. G. V. Brindley, Jr., Scott and White Clinic, Temple, Secy.

Texas Traumatic Surgical Society, San Antonio, April 19, 1959. Dr. G. V. Brindley, Temple, Pres.; Dr. W. E. Crump, 1300 Eighth, Wichita Falls, Secy.

Texas Urological Society. Dr. Charles Hooks, Galveston, Pres.; Dr. Charles Hulse, 405 Medical Professional Building, San Antonio, Secy.

District

Second District Society, Lamesa. Dr. Oscar E. Rhode, Colorado City, Pres.; Dr. John H. Chinn, Jr., Colorado City, Secy.

Third District Society, Plainview, April 4, 1959. Dr. Robert H. Mitchell, Plainview, Pres.; Dr. H. Fred Johnson, 2308 W. Eighth, Amarillo, Secy.

Fourth District Society. Dr. W. L. Smith, San Angelo, Pres.; Dr. S. Braswell Locker, 1501 11th St., Brownwood, Secy.

Fifth and Sixth Districts Society, Corpus Christi, July 10-11, 1959. Dr. O. L. Riley, Corpus Christi, Pres.; Dr. Thelma Frank, 1314 16th St., Corpus Christi, Secy.

Seventh District Society. Dr. Robert N. Snider, Austin, Pres.; Dr. Richard Lucas, 502 W. 13, Austin, Secy.

Eighth District Society. Dr. John H. Childers, Galveston, Pres.; Dr. M. Warren Hardwick, 829 E. Mulberry, Angleton, Secy.

Tenth District Society. Dr. Albert L. Delaney, Liberty, Pres.; Dr. Irving M. Richman, 3280 Fannin St., Beaumont, Secy.

Eleventh District Society, May, 1959. Dr. Ben Wilson, Tyler, Pres.; Dr. Phillip W. Taylor, 833 S. Beckham, Tyler, Secy.

Twelfth District Society. Dr. Paul Mitchell, Corsicana, Pres.; Dr. Mitchell Brown, Torbett Clinic, Marlin, Secy.

Fifteenth District Society. Dr. Charles Wise, Naples, Pres.; Dr. George Bennett, 402 S. Bolivar, Marshall, Secy.

Clinics

Blackford Memorial Cancer Lectures, Denison, Nov. 3, 1959 (tentative). Dr. R. G. Gerard, 509 S. Mirick, Denison, Chm.

International Medical Assembly of Southwest Texas, San Antonio. Dr. Lawrence B. Reppert, 817 South Texas Bldg., San Antonio, Secy.; S. E. Cockrell, 202 W. French Place, San Antonio, Exec. Secy.

North Texas-Southern Oklahoma Fall Clinical Conference. Dr. Frank J. Lee, 1300 8th, Wichita Falls, Chm.

Oklahoma City Clinical Society Conference, Oklahoma City, Oct. 26-28, 1959. Dr. Ralph A. Smith, Oklahoma City, Pres.; Miss Alma F. O'Donnell, 503 Medical Arts Bldg., Oklahoma City 2, Executive Secy.

Postgraduate Medical Assembly of South Texas, Houston, July 20-22, 1959. Dr. Herbert H. Harris, Houston, Pres.; Dr. C. Forrest Jorns, Secy., Exec. Office, 412 Jesse Jones Library Bldg., Houston 25.

Board Examinations

Texas State Board of Examiners in Basic Sciences, April, 1959. Henry B. Hardt, Ph.D., Fort Worth, Pres.; Mrs. Betty J. Anderson, Chief Clerk, 303 East Seventh, Austin.

Texas State Board of Medical Examiners, Fort Worth, June 22-24, 1959. Dr. M. H. Crabb, Fort Worth, Secy.; Mrs. Luanna Reddin, 1714 Medical Arts Bldg., Fort Worth, Assistant Secy.

MEDICOLEGAL NOTES

State Legislation Of Medical Interest

Bills to create a state medical examiner system, recodify existing statutes relating to tuberculosis, license hospitals, and bring the 50 year old food and drug act up to date are among the measures of medical interest which will be considered by the current Texas Legislature. The Council on Medical Jurisprudence of the Texas Medical Association has evaluated these measures and recommended support of most of them. The Executive Council ratified the action of the council January 25.

Approval has been given the following legislation:

Medical Examiner Bill (S. B. 28).—This act would create a state medical examiner commission and provide for a chief medical examiner and appointed regional medical examiners upon request of commissioners courts. Certain specified duties heretofore vested in the justices of peace as to death investigations would be vested in the commission, chief medical examiner, and regional medical examiners.

Tissue Bill.—This legislation has not, as yet, been introduced, but if it is, it would provide for the donation and bequest of human bodies and organs, members and parts thereof, for the purpose of advancing medical science or for the replacement or rehabilitation of diseased or worn-out organs of living humans.

Texas Tuberculosis Code.—This bill when introduced will recodify existing statutes pertaining to the care and treatment of persons afflicted with tuberculosis. It also makes provision for the care of indigent persons having tuberculosis, as well as those individuals refusing care and treatment.

Narcotic Law Amendments.—This legislation when introduced will bring certain drugs, including paregoric, under the professional control of pharmacists and physicians and will eliminate unauthorized outlets for dispensing certain drugs.

Dangerous Drug Act.—This proposed legislation will regulate and control the handling, sale, and distribution of certain drugs classed as "dangerous" and yet will allow the public to receive the therapeutic benefits of these drugs under medical supervision.

Pharmacy Law Amendments.—These amendments mainly pertain to the regulation and practice of pharmacy for better enforcement of existing laws.

Hospital Licensing Act.—This legislation being introduced provides for the licensing of all hospitals with the

exception of nursing homes, private mental hospitals, and certain federal and state hospitals, and mainly emphasizes safety, fire prevention, and sanitation in hospitals.

Air Pollution Bill.—This contemplated legislation will create a Texas air pollution advisory council in the Texas State Department of Health and is intended to alleviate and/or eliminate certain pollution problems that could arise in the future.

Delayed Registration of Births.—A great majority of the states have adopted this system and it has the approval of the Commissioners on Uniform State Laws, as well as the American Bar Association. In effect, it would eliminate fraudulent registrations, would give reasonable assurance to individuals filing delayed records that certified copies will be accepted as proof of birth facts, and in the interest of national security would eliminate the filing of fraudulent records to be used in making false claims to citizenship.

Marriage and Divorce Registration.—Approximately 40 states now have a centralized registration of marriages and divorces. Proof is often needed to qualify for insurance payments or other benefits. Attorneys, courts, welfare agencies, and social service groups are also vitally interested. From the standpoint of civil defense, these records would be valuable in case others were lost or destroyed. In effect, this bill would provide for the "birth and death of families in Texas." Both this and the delayed registration bill are self-supporting by fee.

Coordinated Health Program.—This would be permissive legislation, locally controlled and locally operated, and would permit cities and counties to prevent duplications and conflicts of efforts in improving public health if they desired to do so. According to present state laws, each city must have a city health officer and each county must have a county health officer. In Texas at this time there are some counties that have about 20 cities within the county, which means there will be a county health officer and about 20 city health officers within a county. This legislation would permit a consolidation of effort and personnel if the cities and counties desired to do so.

Sale of Shellfish.—Because of the lack of adequate laws, a large number of oysters consumed in this state are harvested and processed by whatever means are available. Many of these find their way into certified containers and are sold as certified oysters. This act if passed would regulate the sale of shellfish, authorize the State Commissioner of Health to declare polluted areas from which shellfish may not be taken for the purpose of sale, and establish rules and regulations fixing standards of sanitation in the handling of shellfish.

Texas Food, Drug, and Cosmetic Act.—Thirty-eight states have now adopted some form of uniform law, but Texas continues to operate under a completely out-dated and wholly inadequate law. No significant revision has been made in this law since it was originally passed almost 50 years ago. This legislation, if enacted, will give Texas consumers the same protection against adulterated and misbranded food, drugs, and cosmetics as is afforded by the federal law against such goods in interstate commerce.

Opposition has been expressed by the Council on Medical Jurisprudence to H. B. 42 (similar to a bill opposed last session by the council), which provides for the certification of psychologists, qualification of applicants, establishment of a state board of examiners of psychologists, revocation or suspension of certifications, and other items. The council points out that passage of such a law would be another encroachment into the practice of medicine by a group not qualified so to practice.

The council has recommended that individual physicians make known their views on health legislation to their senators and representatives.

Transfusions Carry Risks

Blood transfusions have made possible great strides in the practice of medicine. Because of the relative ease with which blood and plasma transfusions are carried out, it is possible physicians may overlook the fact that transfusions are accompanied by certain dangers to the patient and possible liability to the physician. In giving or receiving blood, there are some risks assumed by patients, but there are others which are not assumed and may cause the physician or hospital legal difficulty.

It seems to be a well known fact in medical practice that a certain number of transfusions have an inevitably fatal reaction. Along this line it has been estimated that 1 per cent of all transfusions result in an allergic reaction. A physician should be cognizant of this and exercise the degree of care required to avoid such reaction.

In emergency cases, a physician must use his best medical judgment to determine whether to administer blood immediately despite the danger of relatively incomplete blood testing, or risk the delay involved while awaiting further tests. Even in emergencies, though, there are generally accepted laboratory procedures.

Unanticipated fainting is expected in certain donors. This fainting, per se, is not unusual, but does become legally important to the physician should injury result.

Secondary anemia after a blood donation seems inevitable, but donors should be screened carefully prior to donation so that this condition is not aggravated. It is this "aggravation" which could cause the physician some legal concern.

A patient does not assume the risk of receiving incorrectly typed blood, nor does he assume the risk of errors in properly identified blood, nor is a patient responsible for blood erroneously given him. In a Mississippi case,* a hospital technician mislabeled two samples of blood which he had originally correctly typed. As a result, the patient undergoing surgery was given incompatible blood and died. The Mississippi Supreme Court, in overruling the charitable immunity doctrine (which is a trend today), held that the hospital was liable in damages for the negligence of its technician. Another case† involved a nurse and intern in New York administering a blood transfusion to a patient over the patient's protests. It developed the transfusion was intended for another patient. Under the law in New York at that time, the hospital was held liable on the basis of an assault or trespass. In still another case,‡ incompatible blood caused a fatal reaction following transfusion. Again the hospital was held liable for the technician's negligence in reporting the blood of the donor compatible with that of the patient.

Evidence of negligence might be shown where the patient is given contaminated blood, blood damaged in storage, or blood which has been stored too long. A patient does not assume these risks, nor does he assume the risk of receiving a disease such as syphilis, malaria, measles, and influenza due to a transfusion as these can be reasonably prevented. If proven to be due to a transfusion, such a disease raises a presumption of negligence.

In treating cardiac patients and infants, physicians are required to exercise special care in giving transfusions so as to avoid overloading the circulatory system. Failure to exercise such degree of care could lead to liability.

—PHILIP R. OVERTON, LL.B., Austin.

**Mississippi Baptist Hospital v. Holmes (55 So. 2d 142).*

†Necolayff v. Geness Hospital (61 N.Y.S. 2d 832).

‡National Homeopathic Hosp. v. Phillips (181 F. 2d 293).

DRUG NOTES

Trancopal, Methoxydone Said to Relieve Anxiety

TRANCOPAL (Winthrop) is a brand of chlormethazanone, a new chemical entity said to be effective both as a muscle relaxant and as a tranquilizer. Trancopal is said to be 91 per cent effective in musculoskeletal disorders such as low back pain, skeletal muscle spasm, stiff neck, bursitis, rheumatoid arthritis, osteoarthritis, and disk syndrome. Trancopal also is said to be 93 per cent effective in anxiety and tension states such as tension dysmenorrhea, bronchial asthma, hyperhidrosis, angina, and hypertension. Chlormethazanone has a lower incidence of side effects than zoxazolamine (Flexin-McNeil), methocarbamol (Robaxin-Robins), or meprobamate (Equanil-Wyeth; Miltown-Wallace). Toxicity is reported as less than with aspirin while contraindications are not known. Trancopal is without gastric irritation and causes no euphoria or depression.

Trancopal is given: 100 mg. orally 3 or 4 times a day.

Chemically, Trancopal is 2-(4-chlorophenyl)-3-methyl-tetrahydro-1, 3, 4-thiazin-4-one-1, 1-dioxide or 2-(4-chlorophenyl)-3-methyl-4-metathiazanone-1-dioxide with the formula as shown in figure 1.

A series of these compounds was prepared and examined and was found to act as central nervous system depressants, paralyzing agents, anticonvulsants, and in general to have a mephenesin-like action. The series was divided into two groups: the sulfides and the sulfones. This latter group has two oxygen atoms attached to the sulfur as in position 1. The profile of action of the sulfides was similar to that of the sulfones; however, the pattern of the action was different. The most promising compounds were those in which position 3 (see Trancopal formula) was one of the lower alkyl groups (for example, methyl, ethyl) while position 2 contained a chloro-substituted phenyl group.

In Trancopal, the chlorine atom is in the 4 position.

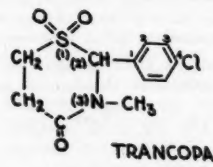


Fig. 1. Formula for Trancopal.

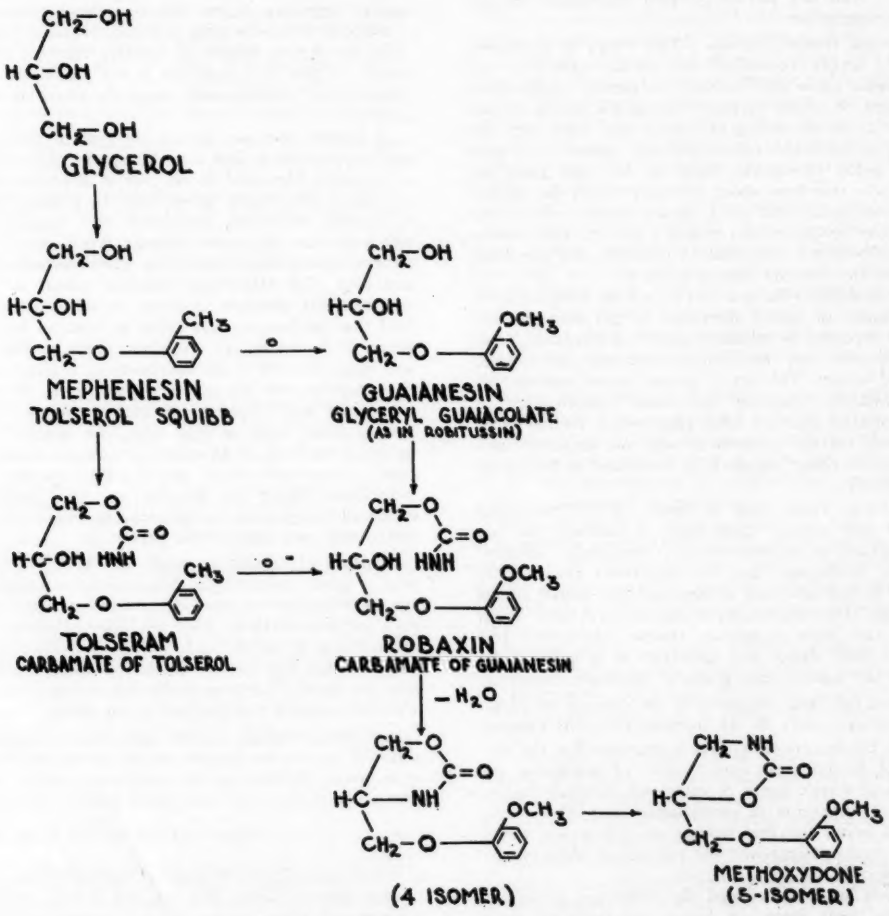


Fig. 2. Derivatives of glycerin.

One other member of the same series, differing only in that it was 3, 4 dichloro-, that is, having a chlorine atom in both the 3 and 4 positions, also showed promise. It is likely that the increased halogenation may increase the potency of some particular aspect of the pharmacological action. Although this is only conjecture, it will be interesting to see whether or not this or other members of this series appear at a later date.

METHOXYDONE (AHR 233), 5-(o-methoxyphenoxymethyl)-2-oxazolidone (Robins) is not yet available, but its relationship to similar structures indicates a possible skeletal muscle relaxant. Pilot studies suggest that the drug may be of value in patients with marked tension, anxiety, and agitation with depression.

The formulas in figure 2 will help orient this compound with certain drugs with which we are already familiar. They all can be considered as derivatives of glycerin. The pictured conversions are didactic and do not indicate methods of preparation. It is logical that Squibb could prepare the cyclic analogue of Tolseram corresponding to Methoxydone.

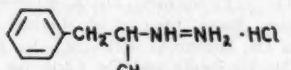
TOFRANIL (IMIPRAMINE), G22355, N-(3-dimethylaminopropyl) iminodibenzyl hydrochloride, is under investigation by the Giegy Company. This drug is similar in its action to chlorpromazine (Thorazine—Smith, Kline and French), being a potent antidepressive drug. Fifty to 200 mg. of the drug has been given orally to about 63 patients, over a 3 week period. Marked to moderate improvement was noted in about 80 per cent of the patients. Three persons were helped slightly, while 6 patients showed no improvement. Discontinuance of treatment after 4 to 8 weeks brought a return of the depression.

CATRON (J.B. 516) is amonoamine oxidase inhibitor which is still being studied by Lakeside Laboratories. Catron may possibly be useful in the treatment of depression states.

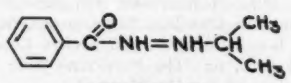
Serotonin and norepinephrine, for example, are important in brain function. These and other amines are inactivated by monoamine oxidase. A monoamine oxidase inhibitor is thought to protect these amines from breakdown, thereby causing their accumulation.

Iproniazid (Marsilid—Roche) has been used as a "psychic energizer" in the depressed mental patient, and its effect has been based on its ability to inhibit monoamine oxidase.

Comparative structures in figure 3 indicate the close relationship between the two drugs. Catron is said to be potent and long acting (up to 7 days in rats).



CATRON



IPRONIAZID

Fig. 3. Formulas for Catron and Iproniazid.

Pfizer is now supplying ABMINTHIC. Chemically this is dithiazanine iodide, already on the market as Delvex (Lilly). Pfizer International markets dithiazanine as DILOMBRIN.

Kynex (Lederle) or Midicel (Parke-Davis) is available in Munich as DAVOSIN (Parke-Davis).

—HERBERT SCHWARTZ, M.S., Austin.

EDUCATION

Postgraduate Courses

Medicine and Surgery, Temple, March 2-4.—This seventh annual Scott and White Conference is presented by the Temple Division of the University of Texas Postgraduate School of Medicine. It will cover problems of general interest in medicine and surgery and is sponsored by Scott, Sherwood and Brindley Foundation. Dr. F. J. L. Blasingame, executive vice-president of the American Medical Association, will be guest speaker. Fee is $25. Registration forms are available from the office of the Assistant Dean, University of Texas Postgraduate School of Medicine, Temple Division, Temple.

Electrocardiography, Oklahoma City, March 2-6.—Given by the University of Oklahoma Medical Center, this course in advanced electrocardiography has as a prerequisite a basic electrocardiography course. Further information may be requested from the Office of Postgraduate Education, University of Oklahoma Medical Center, 801 N.E. 13th Street, Oklahoma City.

Eye, Cincinnati, March 9-12. A 4 day course in eye care and industrial eye programs will be presented by the Institute of Industrial Health and the Department of Ophthalmology of the University of Cincinnati. The course is open to physicians only, with preference given to men in active industrial practice. For further information, doctors should write Secretary, Institute of Industrial Health, Kettering Laboratory, Eden and Bethesda Avenue, Cincinnati 19.

Medicine, Oklahoma City, March 11.—A short course covering advances in the diagnosis and management of common allergic disorders will be held at the University of Oklahoma Medical Center in afternoon and evening sessions. For further information, interested persons should write Office of Postgraduate Education, University of Oklahoma Medical Center, 801 N.E. 13th Street, Oklahoma City.

Ophthalmology-Otolaryngology, Oklahoma City, March 12-13.—Sponsored by the Oklahoma City Society of Ophthalmology and Otolaryngology, this 2 day course will include Dr. Michael J. Hogan of San Francisco among its prominent guest lecturers. Further information may be received from the Office of Postgraduate Education, University of Oklahoma Medical Center, 801 N.E. 13th Street, Oklahoma City.

Allergy, San Francisco, March 15-20.—The fifteenth Congress and Graduate Instructional Course in Allergy will be held by the American College of Allergists at the Mark Hopkins Hotel in San Francisco. Fee for the instructional course is $50, three days; $35, two days; $20, one day; $15, all members of the college in good standing. Further information is available from the college in care of Dr. John D. Gillaspie, treasurer, 2049 Broadway, Boulder, Colo.

Mold Allergy, San Francisco, March 20-21.—Presented by the Association of Allergists for Mycological Investigations, Inc., this instructional course on mold allergy will immediately follow the aforementioned allergy meetings at the Mark Hopkins Hotel in San Francisco. Registration fee is $25. Address for preregistrations is that of Dr. Homer E. Prince, P.O. Box 519, Crockett, Texas.

Surgery of the Hand, New York, March 16-21.—New York University Post-Graduate Medical School offers this full-time course to be given at Beekman-Downtown Hospital under direction of Dr. William T. Medl. Maximum class will be 20. For further information, doctors may write the Office of the Associate Dean, New York University

Post-Graduate Medical School, 550 First Avenue, New York 16.

Rheumatic Disorders, New York, March 17-31.—Orthopedic aspects of treatment of rheumatic disorders will be studied in a part-time course three successive Tuesdays, 9 a.m. to 5 p.m. Extensive clinical material from Bellevue and University Hospitals will be used. A maximum class of 20 will be accepted; the course director will be Dr. Robert L. Preston. Further information is available from the sponsoring New York University Post-Graduate Medical School's Office of the Associate Dean, 550 First Avenue, New York 16.

Medical Technology, Denver, March 16-20.—The third postgraduate course in medical technology will be presented by the University of Colorado School of Medicine and the Colorado State Society of Medical Technologists. Dr. Joseph H. Gast, Baylor University College of Medicine; Dr. Ernest Jawetz, University of California Medical Center; and Dr. William Sunderman, Jefferson Medical College, will be among guest lecturers. A detailed program is available from the University of Colorado Medical Center, Office of Postgraduate Medical Education, 4200 East Ninth Avenue, Denver 20.

Allergic Conditions, New York, March 23-25.—New York University Post-Graduate Medical School will offer in this full-time refresher course a comprehensive review of recent advances in diagnosis and treatment of allergic diseases. Dr. Abner M. Fuchs will direct. For additional information, one may write the Office of the Associate Dean, New York University Post-Graduate Medical School, 550 First Avenue, New York 16.

Myringoplasty, Houston, March 26-28.—The University of Texas Postgraduate School of Medicine will present this course from 9 a.m. until 5 p.m. at the Texas Medical Center. Course content is lectures, motion pictures, demonstrations, operation rooms, office routine, patient follow-up, theory and reconstruction of skin grafting for tympanic perforations, reconstructions of middle ear, adhesive deafness, atresia of the ear canal, and healing of fenestration and mastoidectomy cavities. Tuition is $50.

Chest, Philadelphia, March 30-April 3.—The Council on Postgraduate Medical Education of the American College of Chest Physicians will present its twelfth annual postgraduate course on diseases of the chest at the Sheraton Hotel in Philadelphia. Tuition for the 5 day course will be $100, including luncheon sessions. Further information may be obtained from the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11.

Internal Medicine, New York, April 6-May 29.—Various sessions will be held in allergy, arthritis, cardiology, clinical electrocardiography, endocrinology, gastroenterology, hematology, renal failure, and hypertension, and registration may be for the entire full-time seminar or for part-time. Further information may be received from the Office of the Associate Dean of the sponsoring New York University of Post-Graduate Medical School, 550 First Avenue, New York 16.

Anesthesiology, Oklahoma City, April 8.—The University of Oklahoma Medical Center will sponsor this postgraduate short course on anesthesia for the part-time anesthetist. Those interested may write the Office of Postgraduate Education, University of Oklahoma Medical Center, 801 N.E. 13th Street, Oklahoma City.

Brain, Houston, April 8-10.—The brain-damaged child will be the subject of this 2½ day course at the University of Texas M. D. Anderson Hospital and Tumor Institute. The course will cover all aspects of the problem, and seven national authorities have been invited as guest lecturers. Registration fee is $5. Further information may be received from the hospital, Texas Medical Center, Houston 25.

University of Texas Medical Branch

Dr. Elwood E. Baird of the Department of Pathology of the University of Texas Medical Branch, Galveston, has been elected to the Board of Schools of Medical Technology, which directs training programs for medical technologists in all the approved schools in the United States.

Dr. J. Fred Mullins, chairman of the Department of Dermatology at the Medical Branch, has been named to the board of the recently formed National Foundation for Research in Cutaneous Medicine.

Elected to the American Board of Pediatricians is *Dr. Arild E. Hansen,* chairman of the Department of Pediatrics at the Medical Branch.

Dr. Hamilton Ford, Galveston, was named president-elect of the Central Neuropsychiatric Association recently.

Dr. James V. Warren, formerly professor of medicine at Duke University Medical Center, Durham, will become chairman of the Department of Internal Medicine at the Medical Branch. He is known for his research on heart disease.

Leroy J. Olson, Ph.D., Medical Branch microbiologist, has been awarded a $20,700 National Science Foundation grant to support his research for 3 years. He will investigate "Origin and Evolution of Host Parasite Relationship."

The Alpha Nu Chapter of Phi Delta Epsilon Fraternity at the University of Texas Medical Branch, Galveston, sponsored the Meyer Bodansky Lectureship, January 23. Selman A. Waksman, Ph.D., director, Rutgers Institute of Microbiology, New Brunswick, N. J., was guest speaker.

Prairie View Assembly To Be Held March 2-5

Slated for Prairie View A. and M. College March 2-5 is the twenty-third annual Postgraduate Medical Assembly, which is sponsored yearly by the Texas Tuberculosis Association, Prairie View College, the Texas State Department of Health, and the Texas and Lone Star State Medical Associations. The assembly is approved for category II (informal) training for members of the American Academy of General Practice.

The program will be presented by Texas and out-of-state doctors, including Dr. Joseph G. Gathings of Washington, D. C.; Dr. W. Roderick Brown of Pittsburgh, Pa.; Dr. Julian W. Ross and Dr. J. B. Johnson, both of Washington, D. C.; Dr. J. C. Madison, Dr. Katharine H. K. Hsu, and Dr. Thelma Patten Law, all of Houston; Dr. Hamilton Ford and Dr. Eugene C. McDanald, Jr., both of Galveston; Dr. Morris Polsky and Dr. Catherine J. E. Roett, both of Austin.

Dr. P. G. Byrd of Beaumont will preside at a public health session. Miss Lois Jean Richards of Orange will discuss medical hospital records, and Beatrix Cobb, Ph.D., of Lubbock will speak on "The Physician's Role in Rehabilitation Counseling of the Handicapped."

Baylor University College of Medicine

Dr. D. Truett Gandy, lecturer in dermatology (formerly clinical professor), Baylor University College of Medicine, has returned from a trip around the world during which he participated in the International Congress of Allergology in Paris and the International Congress of Leprology in Tokyo.

Grants Awarded for Training In Mental Institutions

Thirty-three grants for in-service training of workers in mental institutions of southern states have been awarded to date by the Southern Regional Education Board under its program in mental health training and research, announced Dr. Paul W. Penningroth, program director. Dr. R. C. Rowell of Terrell is among the grant recipients.

Nineteen employees of mental hospitals and fourteen employees in training schools in the region have received an average of $202 to visit facilities for the care and treatment of the mentally ill or retarded in 10 different states. These grants are made possible by the National Institute of Mental Health. Persons interested in the grants may write for an application to the Southern Regional Education Board, 881 Peachtree Street, N.E., Atlanta 9, Ga.

State Board of Medical Examiners Sets Deadlines, Announces Licensees

The Texas State Board of Medical Examiners will give examinations and consider applications for licenses by reciprocity June 22-24 at the Texas Hotel in Fort Worth.

Applications for reciprocity must be completed and on file at least 30 days prior to the June meeting date, and applications for the examinations must be complete and on file at least 10 days prior to the June session.

The board met in Austin January 17-18 to review the results of December examinations and to issue licenses by examination and reciprocity. Forty-four licenses were issued to 43 doctors of medicine and 1 osteopath; 40 licenses were issued by reciprocity to 36 physicians and 4 osteopaths.

The board issued a certificate to the doctor making the highest average grade at the examinations: Dr. Cornelius John Hayes, University of Texas Medical Branch in Galveston.

Research in Cutaneous Medicine To Be Supported by Foundation

The National Foundation for Research in Cutaneous Medicine has been formed recently for the support and promotion of research in the field of skin disease. Dr. J. Fred Mullins of Galveston is one of the members of the medical advisory board.

The purpose of the foundation is to promote the advance of medical science in the field of cutaneous diseases, afflictions, and ailments and to support and coordinate research, experiments, tests, and studies on a broad scale.

Ophthalmology Fellowships Announced

Six additional fellowships for residents in ophthalmology, to be awarded July 1, have been announced by the Guild of Prescription Opticians of America, Inc. Applications must be received by May 15.

Each fellowship is for a total of $1,800, payable in monthly stipends over the period of a 3 year residency. Application forms and covering information are available from Fellowships, Guild of Prescription Opticians of America, Inc., 110 East 23rd Street, New York 10.

MEDICAL MEETINGS

18 To Be 1959 Honor Guests At Dallas Clinical Session

The Dallas Southern Clinical Society will have 18 out-of-state doctors as honor guests and speakers when it holds its twenty-eighth annual spring clinical conference at the Statler Hilton Hotel in Dallas March 23-25.

The speakers include Dr. Leo H. Bartemeier of Baltimore, psychiatry; Dr. Elmer Belt of Los Angeles, urology; Dr. Edward P. Cawley of Charlottesville, Va., dermatology; Dr. Robert J. Coffey of Washington, D. C., and Dr. Charles Eckert of Albany, N. Y., surgery; Dr. Jerome W. Conn of Ann Arbor, Dr. Samuel B. Nadler of New Orleans, and Dr. William A. Sodeman of Philadelphia, medicine; Dr. Frank D. Costenbader of Washington, D. C., and Dr. Irving H. Leopold, Philadelphia, ophthalmology; Dr. Philip J. Hodes of Philadelphia, radiology.

Also Dr. Howard P. House of Los Angeles and Dr. Frank D. Lathrop of Boston, otolaryngology; Dr. Charles A. Janeway of Boston, pediatrics; Dr. John W. Kirklin of Rochester, Minn., thoracic surgery; Dr. Frank Lock of Winston-Salem, and Dr. Ernest Winslow Page of Berkeley, obstetrics and gynecology; and Dr. J. Vernon Luck of Los Angeles, orthopedic surgery.

Registration for the meeting including scientific sessions, exhibits, round-table luncheons, and dinner dance is $25.

Youth Mental Health Needs to Be Studied

"The Mental Health Needs of Children and Youth" will be the theme of the twenty-sixth annual conference of the Texas Association for Mental Health to be held March 12-14 at the Hotel Texas in Fort Worth. President is Dr. Frank Schoonover, Jr., of that city.

On the program will be Dr. James C. Flanagan, Galveston; Dr. Robert L. Stubblefield, Dr. George Nicolaou, Dr. Jerry M. Lewis, and Dr. Jack Martin, all of Dallas; Paul Popenoe, Sc.D., of Los Angeles, general director of the American Institute on Family Relations; Bernice Moore, Ph.D., Austin, consultant to the Hogg Foundation and the Texas Education Agency; Fillmore Sanford, Ph.D., chairman of the University of Texas Department of Psychology in Austin; Superintendent John McFarland of the Houston Public Schools; Assistant Superintendent Elden Busby of the Fort Worth Public Schools; Judge Paul Martineau, Corpus Christi; the Rev. Robert Tate of San Antonio; and Tully MacCrea, consultant with the National Probation and Parole Association.

Southwestern Surgical Congress Selects Denver for Meeting

The Southwestern Surgical Congress will hold its annual meeting March 30-April 2 at the Brown Palace in Denver. Guest speakers will include Dr. O. T. Clagett, Mayo Clinic; Dr. J. Englebert Dunphy, Boston; Dr. H. Relton McCarroll, St. Louis; Dr. Douglas Macomber, Denver; Dr. E. Stewart Taylor, Denver; and Dr. Reed Nesbitt, Ann Arbor, Mich. On April 3, Dr. Henry Swan, head of the Department of Surgery, University of Colorado Medical Center, will conduct a series of clinics for those wishing to stay over.

In addition to the scientific program, there will be a trip on a ski train and a tour of the new Air Force Academy.

Houston Neurological Society To Hold Meeting March 12-14

The Houston Neurological Society's seventh annual scientific symposium will be held March 12-14 at the Jesse Jones Library Building in the Texas Medical Center, Houston.

The scientific program will be a symposium on "Pathogenesis and Treatment of Cerebrovascular Diseases," consisting of three parts—anatomy, occlusive disease, and intracranial hemorrhage. Twenty participants from all parts of the United States and Canada will be on the program. Dr. William S. Fields, Houston, will be symposium moderator.

The annual banquet will be in the Emerald Room of the Shamrock-Hilton Hotel on March 13, with Charles Pomerat, Ph.D., as guest speaker. Registration will begin the morning of March 12; there will be a $5 fee. All physicians interested in basic neurologic sciences are invited to attend.

Those desiring further information may write Dr. Claude Pollard, 437 Hermann Professional Building, Houston 25.

Clinics and Hospitals Group Install Maxfield President

Dr. Jack Maxfield, Dallas, was officially installed as president of the Private Clinics and Hospitals Association of Texas at its annual meeting, December 13-14 in Dallas.

Other officers include Dr. Vance Terrell, Stephenville, president-elect; Dr. Van Goodall, Clifton, vice-president; and J. J. George, secretary-treasurer, Levelland.

Topics relating to "Economics and Management," "Association Activities," and "Private Clinic Group Practice" made up the program. Dr. Howard O. Smith, Marlin, President of Texas Medical Association, and Philip R. Overton, Austin, general counsel of Texas Medical Association, were among the speakers. The association went on record as supporting the principle of the hospital licensing law being sponsored by the Texas Hospital Association for submission to the 1959 Legislature.

Houston Symposium Held

Thirty-three distinguished physicians and medical investigators from 10 states, the District of Columbia, and Canada were to be panel participants in a symposium held at the Texas Medical Center in Houston February 5 and 6. Subject of the panels was a new oral hypoglycemic agent, phenformin (DBI).

The sessions were jointly sponsored by the Baylor University College of Medicine, the Houston Society of Internal Medicine, and the Houston Area Diabetes Association.

U. S.-Mexico Meeting Set March 30

The United States Mexico Border Public Health Association will hold its seventeenth annual meeting in Brownsville and Matamoros March 30-April 3. Chairmen of the local planning committees are Dr. David M. Cowgill of Brownsville and Dr. Jorge Burguete of Rovira. Registration will be held in the Civic Auditorium in Brownsville, with a fee of $2.

OF GENERAL INTEREST

Personals

Dr. Thomas M. Holcomb of Lackland Air Force Base has been elected to the American Academy of Pediatrics.

Dr. Max Johnson, who has been a San Antonio physician for 34 years, has been elected to the City Council of that city. He was chairman of the Citizen's Committee for Council-Manager Government, has served as active member and adviser to the Good Government League of San Antonio since its inception, and was defeated in a council race in 1953. He is president-elect of the Texas Industrial Medical Association and chairman of the Bexar County Board of Health.

Dr. Hanes Brindley of Temple, council commissioner and former president of the Heart O'Texas Council, Boy Scouts of America, recently received the Silver Beaver Award for distinguished service to the scouting movement. The presentation was made in Waco. Dr. Brindley was medical advisor for the 1957 National Jamboree in Valley Forge, Pa.

"Safety in Electrotherapy" was the topic of *Dr. Neville Murray*, San Antonio psychiatrist, at a Miami session of the Southern Division, American Psychiatric Association.

The Quota Club of San Antonio recently heard *Dr. Mary Henry* of that city describe her trip to London as a representative of the American Medical Women's Association at an international conference.

Dr. Milford O. Rouse of Dallas was recently honored in the *AMA News* with an article and picture in its "Men of Medicine" section.

Brig. Gen. Elbert DeCoursey, commandant of the Army Medical Service School in San Antonio, has received a recess appointment to the rank of major general. He assumed his present duties in 1955, after serving as director of the Armed Forces Institute of Pathology in Washington, D. C.

When eight member physicians of the Council on Scientific Assembly of the American Medical Association were asked to make New Year's statements on what they foresee in the medical future, *Dr. Michael E. DeBakey* of the Baylor University College of Medicine in Houston replied: "One of the most exciting developments looming on the horizons of medical science lies in the field of tissue transplantation . . . A break-through in this area would provide a tremendous impact on medicine since technical surgical methods are now available for the performance of organ transplantation . . . "

Dr. R. Lee Clark, Jr., Houston, was elected vice-president of the Public Health Cancer Association of America at its annual meeting, and first vice-president of the Mayo Foundation, Alumni Association.

Dr. John L. Matthews of San Antonio has been elected a trustee of the National Medical Foundation for Eye Care.

Dr. Charles T. Meadows, Wharton, has been certified by the American Board of Thoracic Surgery in Chicago examinations.

"The Establishment of a Poison Information Center" was the topic of *Dr. Harold L. Dobson*, Department of Medicine, Baylor University College of Medicine, Houston, when he spoke at the eleventh annual Hospital Pharmacy Seminar held at the University of Texas College of Pharmacy Library, Austin, February 13-15.

Dr. Evelyn G. Powers, Amarillo, appears in the first edition of "Who's Who of American Women." She is a life member of the Texas Association of Obstetricians and Gynecologists and a founding fellow of the American College of Obstetricians and Gynecologists. She has practiced in Amarillo 30 years.

Dr. B. H. Williams, chairman of the Department of Pediatrics of Scott and White Clinic in Temple, has been elected an affiliate of the Royal Society of Medicine in England. He and Mrs. Williams (*Dr. Marjorie J. Williams*), who is an Englishwoman and received her medical degree in England, will visit the Royal Society's headquarters on their next annual visit to that country.

Dr. Charles W. Tennison, San Antonio, is vice president of the American Society of Plastic and Reconstructive Surgeons.

New president of the state's Easter Seal society, the Texas Society for Crippled Children and Adults, is *Dr. Robert A. Murray* of Temple, chief of the Department of Orthopedic Surgery at Scott and White Clinic.

Andrew J. Hatfield, father of *Dr. H. D. Hatfield* of El Paso, died in that city on November 28, 1958. He was a veteran of the Spanish-American War and had been a resident of El Paso 50 years.

Four Texas physicians are among the 13 new executive committeemen and 9 reappointed committeemen of the University of Texas Dads' Association. *Dr. George Grainger,* Tyler, was reappointed, while new appointees are *Dr. Hamilton Ford,* Galveston; *Dr. Richard L. Nelson,* Wichita Falls; and *Dr. Foy H. Moody,* Corpus Christi.

American College of Surgeons Inducts 36 More Texans

Texans among the 1,100 surgeons inducted as fellows of the American College of Surgeons during that organization's most recent Clinical Congress in Chicago were Lt. Col. Theodore L. Hartridge, United States Army Medical Corps; Dr. James N. Adams, Longview; Dr. George E. Rabinowitz, McAllen; Dr. Cecil A. Robinson, Kermit; Dr. Roy R. Roberts, Plainview.

Also Drs. Kenneth C. Bebb, Robert E. Higgs, James A. Scofield, Jr., all of Wichita Falls; Drs. Carroll W. Browning, Wayne H. Gossard, Eugene P. Legg, Shields O. Livingston, Harold M. Mims, Hugh E. Wilson III, all of Dallas; Drs. George D. Broyles, Jr., Orceneth A. Fly, Jr., Thomas G. Gready, Jr., Louis H. Green, James D. McMurrey, George C. Morris, Jr., Jacob F. Schultz, Alvin S. Wexler, and James R. Whitehurst, all of Houston.

Also Dr. Malcolm E. White, Orange; Drs. Wiley J. Jinkins, Jr., Stephen R. Lewis, Galveston; Dr. Edward G. LaCour, Beaumont; Drs. James L. Mims, Jr., Marvin B. Oxford, and William E. Strozier, all of San Antonio; Dr. Charles E. Ratcliff, Lubbock; Dr. Rex L. Rook, Amarillo.

Also Drs. Grant F. Begley, Jack C. Smith, and Cad B. Westfall, all of Fort Worth; Dr. James I. Tyree, Corpus Christi.

$2,200,000 Program Set For San Antonio Hospital

The Bexar County Hospital District managers have approved a $2,200,000 program for "immediate" development of facilities at Robert B. Green Hospital in San Antonio, proposing use of urban renewal and federal government funds to build an addition south of the existing hospital.

The new structure would provide 78,000 square feet of space for diagnostic facilities, out-patient facilities, physical rehabilitation, teaching and classroom facilities, and automation for reducing costs, as well as beds for "progressive patient care." Hill-Burton funds would provide $1,100,000, and the $200,000 the hospital gets each year for treatment of accident cases would retire the other $1,100,000.

Report Given on Financial Status Of Social Security Program

An advisory group drawn from industry, labor, and higher education has completed a year-long study of social security financing, as required by a 1956 edict of Congress. The council's verdict was that the method of financing OASDI is sound and based on the best estimates available, the contribution schedule now in the law makes adequate provision for meeting both short and long range costs.

Social security taxes go into trust funds, one for old age and survivors insurance and the other for disability insurance. Effective January 1, the maximum earnings base was increased from $4,200 to $4,800. The council did not propose any further change in the base but observed that "further consideration will be given to this maximum after the effect of the $4,800 figure has been evaluated."

The council conclusions were as follows: (1) no fundamental changes in the methods of financing the social security system are required or desirable; (2) the present policy of investing the trust funds in the United States government obligations should be continued; (3) in order to keep the system in sound financial condition, periodic scrutiny of all factors which in any way affect the financing of the program might be started.

Research Foundation Names Executive

Former Governor Dan Moody, chairman of the board of directors of the Medical Research Foundation of Texas, has announced the appointment of Sloane Wingert of Houston as executive director of the organization.

The foundation, described as a "partnership of science and community leadership for the betterment of medical research in Texas," is a voluntary, nonprofit organization dedicated to making research facilities at medical and dental schools in the state among the best in the nation.

Mr. Wingert has been campaign assistant for the United Fund of Houston and Harris County for 6 years.

Ileostomy Club Recruiting Members

The Dallas Ileostomy Club was formed in December of 1957 as a mutual aid, lay organization for ileostomy patients.

Club members are available at the request and approval of the physician, for visitation with preoperative and postoperative ileostomy or colostomy patients. The sole purpose of the visit is to give the patient moral support and answer any questions of a nonmedical nature. The club would appreciate physicians informing their patients of this organization. Further details concerning the club may be obtained by contacting Byron Wortham, 722 Nottingham, Richardson.

Hospital Opened in Smithville

Open house for the Smithville Hospital and Clinic in Smithville was held December 14. The one story, 11 patient room structure occupies a floor space of more than 8,000 square feet, plus a dental clinic. It can be converted to accommodate as many as 23 patients, and houses the offices of Dr. James W. Thomas and Dr. Herman L. Koester.

Red Cross Month Is March

"The Red Cross—On the Job When You Need It Most" will be the theme of 1959's American Red Cross observance, slated for March. This year also marks the fiftieth anniversary of Red Cross Nursing Services.

Partial statistics for 1957-1958 reveal that during that period the Red Cross had a grand total of 2,000,000 volunteer workers plus 13,700 career staffers. Servicemen served each month at stations and in hospitals were 86,700; patients in Veterans Administration hospitals served each month were 128,300; states in which Red Cross disaster aid was given to victims were 41; total donations of blood were 2,291,300, while 3,900 hospitals were provided with blood; civilian mental hospitals served were 180; home nursing certificates issued were 240,000.

Other phases of Red Cross operations involved safety services, international services, Junior Red Cross, and work with other community agencies.

Chilean Becomes Pan American Bureau Head

Dr. Abraham Horwitz of Chile took the oath of office as director of the Pan American Sanitary Bureau in ceremonies held January 15 in Washington, D. C. He succeeds Dr. Fred L. Soper of the United States, who has completed his third 4 year term as bureau director and who now becomes director emeritus. Dr. Horwitz is president of the Chilean Society of Public Health and vice-president of the American Public Health Association for 1958-1959.

"Ready Reserve" Doctors Cautioned

The National Advisory Committee to the Selective Service System is notifying all medical schools and hospitals to determine the military status of their faculty and staff members. Any such members belonging to the Ready Reserve will be expected to go into service when called and will not be declared essential to the institutions at the time such a call is made. Such individuals now in essential positions should request immediate transfer to the Standby Reserve. The obligation of members of the Ready Reserve to serve when called also applies to physicians in private practice. A transfer from Ready to Standby Reserve will mean a loss in pay but not a loss of credit toward retirement.

Blood Facilities Directory Published

The first comprehensive directory and description of blood facilities and services ever compiled in this country has been released by the Joint Blood Council in Washington, D. C. Information was compiled from replies of 2,202 of 3,150 institutions queried and provides a central reference and index to institutions and agencies concerned directly or indirectly with the therapeutic use of blood and its derivatives.

The directory will be distributed free to all institutions and organizations which participated in its preparation. Others may obtain it at the cost price of $1.50 from Joint Blood Council headquarters, 1832 M. Street N.W., Washington 6, D. C.

Dr. E. E. Muirhead of Dallas is a member of the council's board.

Flu Vaccinations Urged For Heart, Blood Disease Patients

The United States Public Health Service and American Heart Association are jointly urging persons with heart and blood vessel disease to be vaccinated against influenza.

Experience has shown that patients with heart or lung disease are more susceptible to the hazards of influenza than is the general population. This increased risk is shown by more severe illness and by higher case fatality rates among patients with these diseases. Patients with, or prone to, pulmonary congestion secondary to heart disease are an especially high risk group, according to the committees.

Studies with influenza vaccine have clearly shown that its use significantly reduces the incidence and probably the severity of influenzal infection, in the presence of local or widespread epidemics. Furthermore, use of the vaccine is contraindicated only in those patients who are allergic to the components of the vaccine. The type of local and systemic reactions to vaccine have not been such as to constitute any significant hazard to patients with cardiac disease.

"Dangerous" Hospital Practices?

That nonprofit hospitals are jeopardizing their tax exempt status and the tax deductibility of donations by engaging in commercial enterprises for profit was disclosed in a recent report by the Foundation for Management Research, Chicago, entitled "Doctors' Offices in Hospital-Financed Buildings." The foundation found that the increase in the number of hospital financed medical office buildings was "a dangerous tendency in hospital administration."

Texas cities among those listed as ones in which this practice has gained a foothold were Friona, Houston, and Lubbock.

People Want to Choose Own Doctor

More than three-fourths of the population of the United States want to choose their own doctor, according to the findings in a survey of a sampling of the adult general population. The survey was conducted by Opinion Research Corporation for the American Medical Association.

The study showed that a majority of the population believe in seeing the same doctor regularly and want to choose their own physicians. A majority also felt that free choice would give them more confidence in the doctor, doctors would take a more personal interest in them, and there would be less trouble in getting the doctor to make a home call.

"MD International" to Be Reshown

"MD International," a March of Medicine documentary which was one of television's most acclaimed documentaries, will be rebroadcast in color on Sunday, February 22, from 4 to 5 p.m. on the full NBC network. The story of American doctors who serve in the far corners of the world, this film was chosen for showing at the Brussels World Fair by the United States State Department and was a part of the series which won the first Albert Lasker Award for medical journalism.

LIBRARY REPORT, 1958

Statistics for the past 5 years have shown an increase in the use of the Memorial Library of the Texas Medical Association. This is gratifying to the Library staff, which would like to serve more of the membership than it is now.

The services offered by the Library include (1) reference work, (2) bibliographies, (3) movies for professional and lay audiences, and (4) tape recordings.

There is no charge to Association members for any type of library service offered by the Memorial Library. The borrower is required only to pay the return postage. The Library staff wants to help Texas doctors with their library problems.

The accompanying table compares the statistics for the Memorial Library for the years 1953 and 1958.

Comparison of Statistical Reports, Memorial Library of the Texas Medical Association, 1953 and 1958.

Circulation	1953	1958
Reprints	7,579	15,114
Journals (bound and single)	4,097	7,523
Books	661	1,243
Total	12,337	24,826
Reference requests	1,584	3,048
Motion picture films loaned	776	1,000
Gifts	**1953**	**1958**
Books	362	827
Journals	8,432	10,919
Bound journals	493	171
Pamphlets	392	556
Tape recordings		
Records		1
Surgical instruments		1
Films		
Pictures		2
Total	9,679	12,477

St. Luke, The Beloved Physician

It is generally recognized that Luke, the apostle and author of the gospel bearing his name and of the Acts of the Apostles, was a physician; but, little is known concerning the facts on which the assertion is based.

The late Dr. Howard Kelly of John Hopkins University recognized Luke's professional status and was of the opinion that finding Christ did not cause him to lose his identity as a physician, nor did it detract from his personality. Dr. Kelly paid tribute to the physician apostle by stating that, "We owe it to the dignity and reputation of our profession to study attentively the writings, the life, and the history of this eminent Doctor Medicinae as one who has exercised a more profound influence upon the minds and conduct of men than all the writings of all other physicians who have lived in the last two milleniums."

Medical history is sadly lacking in recording the deeds of this great man. However, Stephen Yesko in *Medical Records*, August 18, 1937, claimed Aurus Cornelius Celsus gave Luke credit for being one of the three leading physicians of his day. The other two were Dioscordes and Antyllus. Dante stated that Luke was of the fraternity of Hippocrates. Luke's constant companion and patient was the Apostle Paul, who affectionately called him the "beloved physician."

Other than a few other similar statements, evidence of Luke's professional status must be obtained by a close analysis of Luke's contribution to the Holy Scriptures. Luke was a modest writer and avoided any mention of his own deeds. The only reference to his own activities is found in his use of the pronoun "we" when he was associated with Paul. The only credit given to himself is in the account of the healing of the father of Publius, the chief man of the island of Malta. This man was miraculously healed of the bloody flux through the prayer of the Apostle Paul. Following this, "Others also which had diseases came and were healed" and who, Luke states, "Honored 'us' with many honors."

In his book, "The Medical Language of Saint Luke," William Kirk Hobart in examining the original Greek manuscript found that the word healed used in reference to the others mentioned in this text was translated from a Greek medical term that applied to being healed by medical treatment. Sir William Ramsey, archeologist and biblical commentator, agreed with Hobart and stated that, "When the invalids came in numbers medical advice was employed to supplement the faith cure, and the Physician Luke became prominent. Hence, the people honored not Paul but 'us.'"

Luke was a native of Antioch in Syria, a large and important city at that time, located near the abrupt angle of the southern coast of Asia Minor and western coast of Syria and Phoenecia. This city had the educational institutions to offer him an excellent liberal arts education, but history does not record any mention of a medical school there. The authors of the "Encyclopedia of Bible Life" believe that it is probable Luke received his medical education at the institution started at Cos by Hippocrates. Luke makes no reference nor left us any clue as to any institution of learning that he may have attended. However, he did give us some clues as to when, how, and where he, a Greek physician, first embraced the religion of Jesus Christ. His detailed account and familiarity with the formation of the church at Antioch in Syria seems to indicate his conversion took place at that time in this city.

Luke was the only Gentile and the only man of science to contribute to the canon of the Holy Scriptures. His contribution comprises two-sevenths of the New Testament and is greater in volume than the writings of any other author, unless the book of Hebrews is included as one of Paul's epistles. There is ample evidence to believe that this book also was written by Luke, inasmuch as it is the only book in the New Testament besides the two known to be written by Luke that was written in classical Greek. This book also has some terms used nowhere else in the Bible except in the Gospel according to Luke and in the Acts of the Apostles. The subject matter of Hebrews is no doubt Paul's, but the style of writing is characteristic of Luke. As Luke was a close companion of Paul, it is not improbable that Luke wrote this book at the request of Paul, who supplied the subject matter.

Close analysis of Luke's writings reveals that the presentation of the subject matter as a whole conveys the point of view, the ideas, and training of a physician. He

gave us a more detailed account of the prenatal stage of John the Baptist and of Jesus Christ. His selection of miracles and parables were predominently medical in nature. He described more miracles dealing with sick individuals and less concerning other matters than any of the other three authors of the Gospels. The parables of the good Samaritan and the rich man and Lazarus, both medical in nature, and the parable of the prodigal son, semimedical in interest, were all three recorded only by Luke.

The exactness of Luke's descriptions reveals the training of a physician. For example, Matthew and Mark both recorded the story of the man with a withered hand, but only Luke recorded that it was his right hand. All four of the Gospels related the story of Peter cutting off the ear of the high priest's servant, Malchus, but only in the Gospel of Luke is it stated that it was his right ear, and that it was healed by Christ. His descriptions were more complete, giving the length of time the disease or deformity was in progress, such as, the woman having an issue of the blood for 12 years, another with some deforming disease, probably arthritis, of 18 years' duration, the man at the temple gate who had been lame since birth, and Aeneas who had had palsy 8 years.

It is generally recognized that one of Luke's sources of material was Mark's Gospel. By changing the phraseology of Mark's uncomplimentary remark toward physicians, Luke revealed the understanding attitude of a doctor of medicine. In telling the story of the woman who was healed by touching the hem of Jesus' garment, Mark stated she "had suffered many things of many physicians." In relating the same incident, Luke implied that he objected to Mark's statement and changed it to "which had spent all her living upon physicians, neither could be healed."

The greatest proof of Luke's professional status is not found in our English translations of his writings, but in the original Greek manuscripts. In his book, already referred to, Hobart compared the language of Luke with that of such physicians as Hippocrates, Aretaeus, Dioscordes, and Galen and found a striking similarity. In all, Hobart found 442 medical terms in the two books written by Luke. He proved by quotations from the Greek physicians mentioned that each of these terms was used by these men in the description of diseases known to them at that time. Most of these terms were not used by other authors of the New Testament and the remainder were used infrequently by them.

Even the introductions to the two books known to be written by Luke reveal a knowledge of the medical literature of his time. These books were actually letters addressed to an official of rank by the name of Theophilus. The introductions to these letters are noticeably different from those of other New Testament books, but are similar in form and wording to those used by the medical writers of that era. For example, the expression in Luke 1:1 translated in English to be "Have taken in hand to set forth" was shown by Galen to have been employed 75 times by Hippocrates in the introductions to his medical thesis.

The medical terms used by Luke were not confined to medical subjects. Even when dealing with nonmedical subjects he colored them with medical words and phrases, a fact in itself that would indicate that the author was medically minded.

In Paul's association with Luke there is a fact of medical interest: The first three times mentioned that Paul was in touch with Luke was during a time when Paul suffered some illness. In his epistle to the Galations, Paul mentioned an illness suffered by him there. From here Paul went directly to Troas where he met Luke. On his way he had to bypass Bythinia, a place he had longed to visit. In his epistle to the Ephesians he wrote of his illness while there, and again we find in the record that he went directly to Luke's home to see his physician. The same is true at the time of returning to Jerusalem from Corinth. It is known that he was anxious to get back to Jerusalem to attend the Pentecostal feast. But instead of taking the quickest and shortest route by going across the Aegean Sea to Asia Minor, he went around this sea through Macedonia to Philippi, where he got in touch with Luke again. From this time on Luke remained constantly with Paul, being his constant companion and physician. Even at the risk of his own life, Luke closely watched over Paul when he was arrested at Jerusalem and at Caesarea, where he was imprisoned 2 years. On the voyage to Rome when the terror stricken passengers of a 2 week storm-tossed ship must have taxed his wits to the limit in trying to tranquilize them, Luke still attended Paul. Then in Rome, Luke remained with Paul until his execution. At this time, when all others had left him, Paul wrote Timothy, "Only Luke is with me." It is no wonder Paul affectionately called Luke the "Beloved Physician."

After Paul's execution it is probable that Luke remained in Rome for a while then went to Bythinia where Paul had longed to go, but could not. Tradition leaves the record that Luke remained here until his death of "natural causes" at the age of 84 years.

The words of A. T. Robertson in his "Word Pictures in the New Testament" are a fitting tribute to the "Beloved Physician":

> As a Greek physician Luke was a university man and in touch with the science of his day. Certainly he was a humanist and a man of culture and broad sympathies and personal charm. He was the first genuine scientist who faced the problem of Christ and of Christianity. It must be said of him that he wrote his books with an open mind and not as credulous enthusiast.
>
> —GERALD KING, M.D., Fort Worth.

Gifts to the Library

Dr. Erford Carter, Austin, 70 books, 89 journals.
Dr. J. N. Dunlop, Austin, 42 journals.
J. K. Kirby, Ph.D., Austin, 60 journals.
Dr. Maurice Jacobs, Austin, 25 journals.
Dr. Raleigh F. Trotter, San Angelo, 1 pamphlet.
Dr. Marion Primono, Dilley, 60 journals.
Dr. Walter Long, Austin, 7 journals.
Dr. S. W. Wilborn, Austin, 126 journals.
Dr. D. R. Womack, Austin, 45 journals.

★ Motion Pictures

First Aid; Parts I and II

16 mm., color, sound, 14 min. each, 1958.

These two films cover the basic lifesaving and related skills taught in the standard course presented in the "Red Cross First Aid Textbook." It is not intended to replace the actual training, but it does acquaint viewers with the same techniques taught in the standard course. The basic skills include bandages and dressings; artificial respiration; shock; control of bleeding; poison; injuries to the bones, joints, and muscles; and common emergencies (heart attacks, epileptic seizures, and fainting). The dramatic stage is set by the illustration of accidents, and then the proper methods of first aid called for by the particular emergency

are demonstrated. These are basic orientation films and are not intended to go into the subject of first aid extensively. However, in all the situations depicted, it should be stated clearly that medical attention or emergency hospital care is imperative. The presentation is good and the films are recommended for any group interested in first aid, beginning with the high school level.

Rabies Can Be Controlled

16 mm., color, sound, 13 min., 1956.

Prepared for showing to all types of groups, the film points out the need for protecting your dog and yourself against the dreaded disease, rabies. Clinical cases of rabies in a human and in a dog are shown. Methods of preparation of a new rabies vaccine are shown as well as its use in mass vaccination programs.

Pitfalls in the Management Of Refractory Heart Failure

16 mm., color, sound, 35 min., 1956.

This picture demonstrates some of the common, yet often overlooked, pitfalls. Differential diagnosis, proper handling of digitalization, and diuretic therapy and its effect upon electrolyte balance are among the vital problems under discussion. Bedside conferences illustrate over digitalization and underdigitalization, hypochloremic alkalosis, the low salt syndrome, and other imbalances leading to apparent "refractory" states.

A Bronchoscopic Clinic

16 mm., color, silent, 33 min., 1954.

The value of and indications for bronchoscopy in the study of diseases involving the tracheobronchial tree are portrayed. The appearance of a variety of lesions is demonstrated.

★ Books

Books Newly Acquired

Association of American Physicians Transactions, Seventy-First Session, 1958.

Brugsch, Heinrich G.: *Rheumatic Diseases, Rheumatism and Arthritis,* Philadelphia, Lippincott, 1957.

Buxton, C. Lee, and Southam, Anna L.: *Human Infertility,* New York, Hoeber-Harper, 1958.

Chao, Dora Hsi-Chih; Druckman, Ralph; and Kellaway, Peter: *Convulsive Disorders of Children,* Philadelphia, W. B. Saunders, 1958.

Coates, John Boyd, Ed.: *Preventive Medicine in World War II, Communicable Diseases,* vol. 4, Washington, Medical Department, United States Army, 1958.

Dameshek, William, and Gunz, Frederick: *Leukemia,* New York, Grune and Stratton, 1958.

Fried, B. M.: *Tumors of the Lungs and Mediastinum,* Philadelphia, Lea and Febiger, 1958.

Garb, Solomon: *Essentials of Therapeutic Nutrition,* New York, Springer, 1958.

Harrower, Molly: *Personality Change and Development,* New York, Grune and Stratton, 1958.

Leake, Chauncey, D.: *The Amphetamines,* Springfield, Ill., Charles C Thomas, 1958.

Lewin, Philip: *Back and Its Disk Syndromes,* ed. 2, Philadelphia, Lea and Febiger, 1955.

Marti-Ibanez, Centaur, Felix . . ., New York, MD Publications, 1958.

Pack, George T.: *Treatment of Cancer and Allied Diseases, Principles of Treatment,* vol. 1, ed. 2, New York, Paul B. Hoeber, 1958.

Smith, Ian Maclean: *Staphylococcal Infections,* Chicago, Year Book Publishers, 1958.

Stephenson, Hugh E., Jr.: *Cardiac Arrest and Resuscitation,* St. Louis, C. V. Mosby, 1958.

Talbott, Hohn H., and Lockie, L. Maxwell: *Progress in Arthritis,* New York, Grune and Stratton, 1958.

Thannhauser, Siegfried J.: *Lipidoses,* New York, Grune and Stratton, 1958.

Trowell, H. C., and Jelliffe, D. B.: *Diseases of Children in the Subtropics and Tropics,* London, Edward Arnold, 1958.

Walton, John N., and Adams, Raymond D.: *Polymyositis,* Edinburgh, Livingstone, 1958.

Book Notes

Psychosomatic Medicine

EDWARD WEISS, M.D., Professor of Clinical Medicine, Temple University Medical Center, Philadelphia; and O. SPURGEON ENGLISH, M.D., Professor and Head of the Department of Psychiatry, Temple University Medical Center, Philadelphia. ed. 3. 557 pages. $10.50. Philadelphia, W. B. Saunders Company, 1957.

This well known book in the third edition has become what really amounts to two books: a first part which is a review of general psychiatry and a second part which is a system by system review of psychosomatic medicine.

The first part, running to 180 pages, covers a vast number of topics, including history taking, classification and description of neuroses and psychoses, theory of personality development, diagnostic procedures, and even psychological tests. Written by two clinical experts, this section, although didactic, is spiced by the clinical perspicacity of the authors. However, in trying to cover so much ground they have dealt summarily with the subjects; anxiety, for example, which is a more complex problem than simply childhood conflict and maladjustment. From a scientific point of view the first part of the book is not well documented, being more an expression of experience and opinion, but of course very good opinion.

The second part of the book is a useful reference work and makes good reading on all psychosomatic subjects, especially if one wishes an orientation to a system or disorder. This part makes the book a worth-while acquisition for any psychiatrist's library. As in the first part we find the experience and opinion of two qualified experts.

The book offers an attractive format and is readable throughout. The orientation fits well with that of the psychiatrist in private practice. It makes a good textbook for medical students. At the same time the general practitioner or internist will find a helpful statement of the emotional aspects of illness.

—A. Chapman Isham, M.D., Lubbock.

Drug Resistance in Micro-Organisms; Mechanisms of Development

Ciba Foundation Symposium, edited by G.E.W. WOLSTENHOLME, M.B., B.Ch. and CECILIA M. O'CONNOR, B. Sc. 352 pages. $9. Boston, Little, Brown and Company, 1957.

The Physician's Own Library

MARY LOUISE MARSHALL, Librarian, Rudolph Matas Medical Library, Tulane University; Assistant, Orleans Parish Medical Society Library, New Orleans. 87 pages. $3. Springfield, Ill., Charles C Thomas, 1957.

This small book has a wealth of information packed into its 87 pages. Furthermore, it is all practical and usable information.

It is so written as to be an effective guide to the establishment of an elaborate physician's library, with complete sets of encyclopedic reference books, efficient catalogues, and cross file indices. At the same time, any doctor's library of lesser proportions, down to the smallest, can be enhanced and made more useful with the help of this little book.

Miss Marshall gives helpful advice and suggestions on such subjects as what dictionaries to own; how and when to weed out unuseful materials; what book loan services are available; how to utilize photoduplication; where to go to procure books and journals the best way; and how to make library records and start an index. She winds up with some sage suggestions on how we can and should use, not just own, our own libraries.

Many other valuable suggestions are given, including a chapter on preparing a medical paper, from choosing the subject to actually mailing the paper to the editor. All her material is concise, practical, and obviously drawn from long experience. This is a good book to own.

—Morris Polsky, M.D., Austin.

Water and Electrolyte Metabolism In Relation to Age and Sex

Ciba Foundation Colloquia on Ageing, Vol. 4, Edited by G. E. W. WOLSTENHOLME and MAEVE O'CONNOR. 327 pages. $8.50. Boston, Little, Brown and Co., 1958.

This is the fourth colloquium in the Ciba Foundation's program for the encouragement of basic research relevant to processes of ageing. With the realization that electrolytes enter into practically every reaction that takes place in the body and that little is known about many of them, experts on all aspects of the subject were asked to share their ideas. Twenty-seven authorities participated in the presentations and discussions.

The Ciba Foundation is an international center supported by Ciba, Ltd. of Switzerland. It is established under the laws of England as an educational and scientific charity and is administered independently and exclusively by British trustees.

A History of Public Health

GEORGE ROSEN, M.D., Ph.D., M.P.H., Professor of Health Education, School of Public Health and Administrative Medicine, Columbia University; Editor, *American Journal of Public Health*. 551 pages. $5.75. New York, MD Publications, Inc., 1958.

This book is a comprehensive review of public health from the earliest civilizations to the present. It shows man's endeavor to control infectious diseases, provide proper sanitation, and provide medical care.

The health problems of the community have been considered in terms of their political, social, and economic patterns. Throughout history, a public concern for the health of human beings and man's banding together to promote better community health is found.

The book is of great interest to the historian. The author is not only a leader in the field of public health, but also in the field of medical history.

Orthopedic Diseases: Physiology-Pathology-Radiology

ERNEST AEGERTER, M.D., Professor of Pathology and Director of the Department of Pathology, Temple University Medical Center and School of Medicine; Professor of Orthopedic Pathology, University of Pennsylvania Graduate School of Medicine; and JOHN A. KIRKPATRICK, JR., M.D. Radiologist, St. Christopher's Hospital for Children; Assistant Professor of Radiology, Temple University Medical Center. 602 pages. $12.50. Philadelphia, W. B. Saunders Company, 1958.

The authors have set as their goal furnishing a book useful ". . . for the clinician who wants to increase his diagnostic efficiency, for the radiologist who is perplexed by the meaning of an overwhelming array of radiographic nuances, for the pathologist who is distraught by his inability to interpret what he sees through his microscope, for the young specialist who wants to pass his board examinations, and for the medical student who must acquire a certain amount of knowledge of orthopedic diseases in order to graduate." The text does not appear to be equally useful for the several categories of readers.

"Orthopedic Diseases" is a worth-while review for the clinician and young specialist. The authors admittedly present little original material; however, they have brought together data that would require considerable time and effort to find and review. Various viewpoints in the numerous controversial areas of orthopedic pathology are briefly reviewed. The authors have wisely avoided lengthy discussions of hypotheses which as yet cannot be definitely established. Their own arbitrary classifications are admitted. The orthopedic specialist who has not recently reviewed the basic sciences should find this book worth while as a refresher, and the medical student should find suitable material for a foundation for his clinical experience in musculoskeletal disorders.

It is probable that radiologists and pathologists will not find this book penetrating or complete enough to add much to their diagnostic acuity. The radiographs of similar and confusing entities are not compared or differentiated. The radiologist might wish for more on the correlation of morbid anatomy and the roentgenographic nuances. Most entities are illustrated by one to several photomicrographs; photographs showing the gross changes are less frequent. This material will probably not be of much assistance to pathologists in resolving their diagnostic problems in actual practice; however, the book should prove useful as a starting point for the new radiology and pathology resident and as a rapid review and source of references for the practicing specialist.

The workmanship of the book is excellent. The format facilitates easy reading, the illustrations reproduce well, and the text has been well proofed and indexed.

—Robert O. Whitson, Baytown.

Negroes and Medicine

DIETRICH C. REITZES, teacher of sociology at Indiana University; director of the project "Negroes in Medicine," financed by the Rockefeller Foundation and conducted by the Department of Sociology at the University of Chicago. 400 pages. $7. Cambridge, Mass., Harvard University Press, 1958.

The first section of the study is devoted to the Negro medical students and Negro applicants to medical school. The second part is a study of 14 communities with its primary objective the identification and analysis of the specific processes which brought about or blocked integration in medicine.

The book provides information on opportunities for Negroes in medicine and the status of medical care for and by Negroes. The way in which the material is presented makes this book valuable as an addition to the study of race relations.

Drugs of Choice, 1958-1959

WALTER MODELL, M.D., Editor, Associate Professor of Pharmacology, Cornell University Medical College; Member, Revision Committee, United States Pharmacopeia XVI. 931 pages. $12.75. St. Louis, C. V. Mosby Company, 1958.

In the preface to "Drugs of Choice," the statement is made that "this book is a practical guide to the selection of the best drug for a particular therapeutic problem." An obviously Herculean task is undertaken by 37 contributors, all of whom are outstanding in the world of medicine and all but one of whom are doctors of medicine. There are 35 chapters, each representing a clinical group of disorders requiring treatment with good delineation of subject material and little repetition. Each chapter is followed by a list of appropriate references, and each list of references is followed by a 2 to 16 page list of various proprietary preparations and chemical names. It is intended that this presentation would assist the physician in determining the preferable drug in any given situation.

Unfortunately, this objective is not realized. The material presented is up to date although it does include occasional discussion of drugs which are somewhat more than time honored. An admission is made that the drug index "will not help the reader make his choice," but similarly, the opinions expressed in the text seem rather carefully phrased to avoid offense to any drug company. Only rarely is a statement made of definite superiority of any preparation although there are occasional pertinent statements with regard to the uselessness of some preparations. More of this is definitely needed. Unnecessary attention is paid to certain subjects; consequently, certain sections must omit pertinent and interesting material regarding medications whereas other sections are hopelessly embossed with trivia. Some sections contain structural formulas or anatomic diagrams while other sections can do little more than mention the name of a drug. Despite the tremendous space devoted to drug indices, insufficient information is presented in each case and a true index does not exist. In at least one important condition preference is expressed for a preparation not even listed in the index.

After reading the preface, I looked forward with great anticipation to the text. The need for such a work is such that I maintained my anticipation throughout the book, but never saw my expectations reached. It is too full of clinical material to be used by the medical student in pharmacology; it may be of value to the practitioner as a reference although he will find it difficult to use. As far as the practitioner is concerned, almost as much pertinent information can be obtained from generally distributed desk references. The need for this text is considerable; the effort of the contributors is notable; but the end leaves something to be desired. The preface of the text is quite good in stating its aims; the sections on infectious disease, nutritional disorders, cancer, and hematology are well done; unfortunately, these represent only a small portion of this book.

—John C. Meadows, Jr., San Antonio.

The Eternal Search; The Story of Man and His Drugs

RICHARD R. MATHISON, staff of *Los Angeles Times*, formerly managing editor of *Fortnight* magazine and reporter for the Associated Press. 381 pages. $5.95. New York, G. P. Putnam's Sons, 1958.

In this book the author presents a timetable of events in the development of the lore and legend of the world's drugs and medicines. The book traces the important doctrines and even the old wives' tales down through the centuries. He goes on to show how some of the fantastic legends and superstitions have found their way into modern pharmacy.

Mr. Mathison records the most primitive of remedies and the weird and fantastic attempts of drug therapy practiced during the middle ages. The book is filled with a wealth of tales and notes of interest.

The author describes his book as follows:

> *The Eternal Search* is not a textbook. It offers no panaceas. It makes no effort to censor the doings of our forefathers . . . It recounts old lies, gossip, and quackeries as well as truth, facts, and acts of great devotion and integrity. If this volume has any purpose, it is . . . to remind us that our past rules our future . . . We shall, no doubt, seem as superstitious and strange to generations to come.

This book is a history of drugs, medicine, and the art of the apothecary.

★ **Texas Medical Association**

Record Attendance Set At County Officials Conference

A new record atendance of 507 was set at the Texas Medical Association's headquarters building in Austin the week end of January 23-25 for the Conference of County Medical Society Officials, Orientation Program, Executive Council session, and committee meetings.

County society officials and orientees met together for the guest speaker presentations, including Dr. Russell B. Roth, Erie, Pa., chairman, Committee on Federal Medical Service, American Medical Association; Frank Ikard, Wichita Falls, representative, Thirteenth Congressional District; Dr. Ernest B. Howard, Chicago, assistant executive vice-president, American Medical Association; George Bugbee, New York, president, Health Information Foundation; and Edwin Vennard, New York, managing director, Edison Electric Institute. They also heard Dr. Howard O. Smith,

Orientees, county society officials, and committee members form a line for registration during the morning of January 24. A total of 507 attended the meeting, setting a new record for an Executive Council week end.

Marlin, President of the Association, discuss the dangers of "Spectatoritis" and the importance of active participation in medical affairs. Doctors attended a luncheon Saturday noon at the headquarters building as guests of the Association and a hospitality hour Saturday evening, courtesy of Medical Protective Company.

The Orientation Program, attended by 136 new and transfer members, included talks on such subjects as medical economics, public relations, medicolegal questions, and services rendered by the Association.

The Conference of County Society Officials, with Dr. C. E. Willingham, Tyler, Vice-President, presiding in the morning and Dr. Charles P. Hardwicke, Austin, Speaker of the House, presiding in the afternoon, included two panels on "We Need Your Help" and "What's Ahead for Medicine in 1959," moderated by Dr. Franklin W. Yeager, Corpus Christi, President-Elect of the Association. The Executive Council met Sunday morning to hear reports from the various boards, councils, and committees which met Friday evening, during the day Saturday, and Sunday morning. Dr. Howard O. Smith, President, presided.

Guest Speakers

Progress Continues for AMA

The American Medical Association can promote public relations, improve standards, take disciplinary action against members not abiding by standards, offer a channel for liaison with other organizations, develop prestige and status, and influence legislation in a manner physicians cannot achieve individually, Dr. Ernest B. Howard of Chicago, assistant executive vice-president of the AMA, pointed out in his talk on "Building a Stronger and More Effective Medical Organization."

Among weaknesses that have been recognized in the AMA are the tendency toward splintering of the profession through growth of specialty societies; poor contact among individual physicians, county and state societies, and the AMA; sometimes ineffectual public relations efforts; occasional lack of firm disciplinary action against unethical physicians or those whose competence is questioned; bureaucratic committees established years ago and now become outmoded; and insufficient liaison with other national organizations. Steps recently have been taken to eliminate these weaknesses, Dr. Howard noted, through appointment of new personnel in the headquarters office, a realignment of administrative duties, an enlarged field program, reappraisal of programs and projects, and review of relationships with such groups as specialty and hospital organizations.

Howard O. Smith, Marlin, President, Texas Medical Association; Congressman Frank Ikard, Wichita Falls, Thirteenth Texas Congressional District; Dr. Joseph D. Hall, Wichita Falls; and Dr. William B. Hahn, Austin, enjoy themselves (left to right).

Voluntary System Demands Joint Efforts

It is true that the new 12 year old National Health Service in England has solved the problems of enrollment and benefits—but at the expense of a rigid administrative system which has limited the flow of money into the health field, reduced incentives to improve the quality of medical care, and imposed controlled incomes and methods of practice on the medical profession, George Bugbee, president of the Health Information Foundation, New York, told his Texas Medical Association audience as he gave "Observations on Government Medicine in England."

The most powerful answer to the continuous attack on the American voluntary system, Mr. Bugbee said, has been the tremendous growth of voluntary health insurance in this country. Criticisms such as those pertaining to overuse of services and inflated charges can be answered also, he added, but the issues require group action.

"I believe that in place of much current conflict (between physicians and hospitals, between Blue Cross-Blue Shield and the insurance companies), we need more joint concern among those who provide services and the third party agencies. These groups must work out administrative solutions that will be satisfactory and acceptable to the public, yet protect the freedom of providers of health services."

Free Enterprise Is Individual Responsibility

If the American people are to be saved from creeping socialism and galloping collectivism, they must be told the facts about free enterprise in a way they can understand, Edwin Vennard of New York told physicians in a talk entitled "Will America Remain Free?" Vice-president and managing director of the Edison Electric Institute, which is the national trade association of electric light and power companies, Mr. Vennard is a professional engineer.

The American way of life is being threatened from within, chiefly because many Americans who profess to despise communism and socialism do not understand the threat of growing government control, the speaker said. It is the responsibility of every individual in a position of community leadership—including the doctor—to be constantly on the alert for ways to tell the free enterprise facts, Mr. Vennard added. "How well our community leaders respond to this call will ultimately determine the extent to which we, as a nation, will retain the freedoms we now possess."

Federal Medicine Erases Private Patient

The vanishing private patient—and the private practitioner who is vanishing along with him—were mourned by Dr. Russell B. Roth of Erie, Pa., when he addressed members of the Texas Medical Association in Austin on "Federal Medicine and the Private Patient."

Dr. Roth, chairman of the American Medical Association's Committee on Federal Medical Service, posed a number of questions which his committee is now studying and which it will discuss with such groups as the Special Medical Advisory Board to the Veterans Administration, Deans' Committees, and the AMA's Council on Medical Education and Hospitals.

Among these questions: Is it advisable that 85 per cent of all patients now being treated in VA hospitals be there for non-service connected illnesses? As the nation's veteran population ages and such illnesses increase, will their treatment in VA hospitals place a tremendous financial burden on the federal government and thus on the taxpayer? Are private hospitals losing interns and residents to VA hospitals? Is the current emphasis on research, other than clinical, in large VA hospitals contributing to the de-emphasis of service-connected care and the beginning of "empire-building" as well? Would the transforming of many of the fine physical plants now functioning as VA hospitals into community, county, or state hospitals allow them to serve many more people much more economically?

Bills, Taxes, Budget Form Ikard Talk

"Congressional Issues of Particular Interest to Physicians" were discussed by Congressman Frank Ikard of Wichita Falls, who represents the Thirteenth Texas District, in Austin January 24. Specific points he discussed included the following:

The President's Budget for the Fiscal Year 1960: As submitted to Congress, the budget is in truly precarious balance, yet maintaining a balanced budget "is the greatest domestic challenge facing the nation."

H. R. 10: Mr. Ikard stated that chances are excellent that this bill will be favorably acted upon, for the second time, by the Commitee on Ways and Means, and that it will shortly thereafter receive congressional approval. This bill would allow the professional man temporary tax deferment for a limited portion of his income which he might set aside for his own retirement.

Standing in front of the Texas Medical Association's headquarters building is Dr. Russell B. Roth, Erie, Pa., chairman, Committee on Federal Medical Service, and Dr. Ernest B. Howard, Chicago, assistant executive vice-president, American Medical Association, guest speakers.

Health Service for the Aged: The Secretary of Health, Education, and Welfare is preparing a report, to be available March 1, on the feasibility of caring for the health needs of old people under some type of insurance plan. As the question of taking care of older people becomes the subject of more and more attention, it is imperative that doctors devote their best efforts toward finding a solution to this vexing problem, Mr. Ikard emphasized.

Proprietary Nursing Homes: Under way are hearings on a bill which would authorize FHA type mortgage loan guaranties for proprietary nursing homes. This is similar to an American Medical Association supported bill in Congress last year.

Health Program for Federal Civilians: Bills have been introduced in both houses to set up a voluntary contributory health insurance program for civilian workers of the federal government. "This would seem to be much more desirable than a compulsory federal plan which has been suggested," Mr. Ikard commented.

County Society Panels

Physicians attending the Conference on County Medical Society Officials heard two panels, the first, entitled "We Need Your Help," featuring discussions of voluntary health insurance, problems of the aging, and closer liaison with the Woman's Auxiliary, while the second gave a picture of "What's Ahead for Medicine in 1959."

"We Need Your Help"

The present rate of increase of 5 per cent a year (each year since 1946) may price voluntary health insurance out of reach of the average breadwinner, Dr. A. Rex Kirkley of Belton, member of the Texas Medical Association Committee on Voluntary Health Insurance and Health Care Costs, told physicians attending the January 24 meeting in Austin. Though many factors precipitating increased costs have resulted in better medical care, "we can no longer ignore or tolerate the abuse of health insurance by patients, physicians, or hospitals," Dr. Kirkley said.

The committee is studying the merits of co-insurance and deductible insurance, in which the patient pays a part of his medical bill, thus reducing possible abuse, he added. County societies were urged to appoint committees to study this problem on a local basis, to cooperate with the woman's auxiliary in expanding coverage in health insurance, and to aid in public information efforts in their own communities.

Discussing "Problems of the Aging," Dr. Wendell D. Gingrich of Galveston, chairman of the Texas Medical Association's Committee on Problems of the Aging, emphasized the popular interest in problems—medical, economic, and social—arising from longer life. He touched on the significance of the compulsory retirement age to health, as well as to financial independence, and urged his hearers to look into the magnitude of the problem of health care for oldsters in their own communities. He underlined the importance of the medical profession's acting to help solve the health care problem. "If you are inclined to let George do it," he warned, "look over your shoulder for George and you will find your Uncle, whose name is Sam, ready to tell you what to do."

Mrs. William D. Nicholson of Freeport, first vice-president of the Texas Medical Association Woman's Auxiliary, asked Texas physicians to become acquainted with projects of the Auxiliary and to urge their wives to take active part in its work, when she addressed TMA members attending the January 24 meeting in Austin. "A weak county medical

society usually promotes a weak auxiliary," she reminded the men, citing particularly the need for joint informative meetings on legislation, public relations, medical ethics, mental illness, civil defense, and similar subjects.

Auxiliary projects touched upon by Mrs. Nicholson included Texas' 230 future nurse clubs with 5,000 members, being sponsored by the women's group; sponsorship of science-fairs for public school students; the sale of Christmas cards (40,000 in December, 1958) to benefit the American Medical Education Foundation; the sale of *Today's Health* magazine; philanthropic funds to help support the TMA Memorial Library, to provide loan funds for medical students, and to be used as gifts for families of deceased physicians who are in need. Training of baby sitters, home and highway safety, and civil defense are other Auxiliary projects physicians should know about, Mrs. Nicholson said.

"What's Ahead for Medicine in 1959"

"What's Ahead for Medicine in 1959" in the Eighty-Sixth Congress, in the State Legislature, in the American Medical Association House of Delegates, and in the Texas Medical Association House of Delegates was the subject of the second panel presented during the Conference on County Medical Society Officials.

Dr. Franklin W. Yeager of Corpus Christi, President-Elect of the Texas Medical Association, moderated the panel discussion, which included Dr. John E. McDonald of Tulsa, member of the Commitee on Legislation of AMA; Philip R. Overton of Austin, general counsel of TMA; Dr. Milford O. Rouse of Dallas, chairman of Texas delegates to AMA; and Dr. James D. Murphy of Fort Worth, vice-speaker of the TMA House of Delegates.

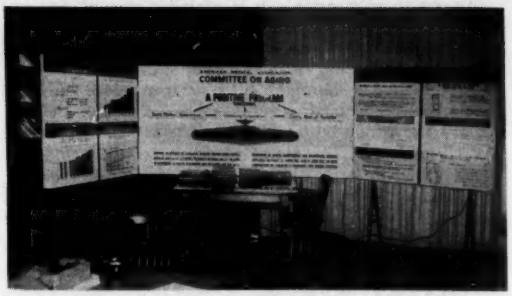
When the TMA House of Delegates meets in San Antonio on April 18, Dr. Murphy said, it will be faced with such problems as whether the Board of Trustees should be increased from five to nine, whether American citizenship should be a requirement for membership in the Association, and whether alternate delegates to the AMA should be reimbursed when attending annual and interim sessions.

Because of the wide range of decisions to be made and the importance of these decisions to each individual physician, Dr. Murphy urged the county societies to select their delegates to the House with the greatest care. Such delegates should be well prepared, preferably available to serve several years, and willing to attend every reference committee and House session.

"The delegate must attend all sessions of the House of Delegates. Golf, social engagements, even the scientific program must not be allowed to conflict. I mention this because 18 county societies were totally unrepresented at *all* the sessions in Houston last year . . . ," Dr. Murphy stressed.

Dr. Rouse commented on the problem of health care for the aged, a report of the Commission on Medical Care Plans, and progress being made by the AMA Committee on Insurance and Prepayment Plans. He reported that a request has come from AMA for each state society to express itself as to what is involved in "free choice of physician," a matter which brings with it a correct interpretation of "third party" relationships in medical care.

Legislation which is good for the people is good for those practicing medicine, Attorney Philip R. Overton told members of the Texas Medical Association, as he alerted them to bills which will come up in the current session of the Texas Legislature. Among these are bills to license Texas hospitals, to set up a statewide system of medical examiners in place of the antiquated justice of the peace system, to regulate dangerous drugs, to clarify and update



In connection with the talk on problems of the aging by Dr. Wendell D. Gingrich, Galveston, chairman, Committee on Problems of the Aging, an exhibit by the American Medical Association's Committee on the Aging was on display.

laws pertaining to tuberculosis, as well as enabling legislation for vendors' medical care in Texas, bills pertaining to radiation control, and many others with medical implications.

Work of the American Medical Association's Committee on Legislation was described by Dr. McDonald. Warning Texas physicians that they cannot afford to be complacent in the face of expected efforts by the Eighty-Sixth Congress to pass considerable legislation detrimental to free enterprise, Dr. McDonald told the group that doctors must work more closely with their allies and believers in private enterprise. "Apostles of socialized medicine have resorted to a new technique: divide and conquer," he said.

Dr. McDonald emphasized the physician's importance in seeking ways to solve the growing problem of medical care for the aged. "We must assume the primary responsibility to enrich the lives of those to whom we've given longer life," he said. He cited efforts of the Joint Council on Health Care for the Aged in this area, and pointed to the present trend of compulsory retirement of persons aged 65 as a chief cause for emotional and physical let-downs in the older population.

Despite the many criticisms of the medical profession, Dr. McDonald said, "there is no better profession in the world than medicine, and we are practicing the best medicine."

Orientation Program

The sixth Orientation Program sponsored by the Texas Medical Association for new and transfer members was presided over by Dr. C. E. Willingham, Tyler, Vice-President, Texas Medical Association, during the morning and Dr. Charles P. Hardwicke, Austin, Speaker, House of Delegates, during the afternoon.

Orientees heard the various guest speakers, in addition to the following other presentations: "Welcome: Objectives of Orientation Program," Dr. Travis Smith, Abilene, vice-chairman of the Board of Councilors; "The Texas Medical Association; An Accounting of Stewardship—What Happens to Your $50," Dr. Troy A. Shafer, Harlingen, member of the Board of Trustees; "Public Relations and Socio-economic Considerations in the Practice of Medicine," C. Lincoln Williston, Austin, Executive Secretary.

The program also included "Medical Ethics Considerations in the Practice of Medicine," Dr. C. E. Oswalt, Jr., Fort Stockton; "Medical Etiquete; Obligations of the Physi-

cian to Colleagues and to the Profession," Dr. R. Mayo Tenery, Waxahachie, Councilor, District 14; "Serving the Doctors of Texas," Donald M. Anderson, Austin, assistant executive secretary; "Workmen's Compensation Laws; Charges, Obligations and the Law," Smith Pettigrew, Dallas, medical coordinator, Texas Employers' Insurance Association; "Legal Aspects of Medical Practice; Malpractice—How to Avoid It," Pat Bailey, Austin, assistant general counsel of the Association.

Committee Progress Reports Heard by Executive Council

Reports from boards, councils, and committees were received by the Executive Council of the Texas Medical Association meeting Sunday, January 25, in the headquarters building in Austin. Dr. Howard O. Smith of Marlin, President, and Dr. C. E. Willingham of Tyler, Vice-President, alternated at presiding. The invocation was given by Dr. C. P. Hardwicke of Austin, Speaker of the House of Delegates. Mrs. John D. Gleckler, President of the Woman's Auxiliary, spoke briefly.

The following groups reported:

Board of Trustees.—Authorization was given to the Austin architectural firm, Jessen, Jessen, Millhouse, and Greeven, to begin a remodeling program for the headquarters building which may provide additional space for the Library, a second large meeting room, greater utilization of office facilities on the second floor, and more adequate space for printing and mailing services. A preliminary fiscal report for 1958 expenditures shows the margin of income in the general operating fund to be $2,100 after all bills for the year were paid. Policies to permit the Library to handle reference requests only for members of the Association and the *Journal* to accept advertising from clinics, hospitals, and voluntary health agencies at reduced professional rates were announced.

Board of Councilors.—As a result of reports that the procedure for grievances between physicians and county societies is not being followed, the Councilors reemphasized the importance of the procedure, pointing out that the board of censors is not a summary court, merely a fact finding body. A substitute method for selecting the General Practitioner of the Year is being planned.

Executive Secretary.—The Memorial Library staff processed more than 3,000 reference requests in 1958, an increase of 22 per cent over 1957 and 91 per cent over 1953. More than 400 physicians sought locations through the Physicians Placement Service; 68 communities sought help in locating a doctor. Net revenue from advertising in the *Texas State Journal of Medicine* amounted to $86,000 last year, an increase of 11 per cent over 1957 and double the revenue over 1954. All space for 1959 annual session technical exhibits has been committed. Net income from technical exhibits should amount to approximately $14,500, which is double the amount obtained from the 1954 meeting in San Antonio.

Council on Medical Jurisprudence.—A number of proposed bills were brought to the attention of the Council. The majority were approved. No action was taken on two bills, one enabling legislation which could implement the constitutional amendment on Vendor's Medical Care and another on radiation regulation. The Council opposed the bill proposed by the Texas Psychology Association, which calls for the legal certification or licensure of psychologists.

Council on Scientific Work.—Annual session plans are nearing completion, with approximately 35 programs to be presented by scientific sections, state committees, and related organizations. Special symposiums will be given by the Committee on Cancer, the Committee on Nuclear and Atomic Medicine, and the Committee on Industrial Health. Refresher courses, with special courses on office management and on interpretation of chest roentgenograms, general meetings, motion pictures, and Fiesta entertainment will round out the program.

Council on Medical Education and Hospitals.—A recommendation that the Medical Educator of the Year, an award which is being considered, give a lectureship at the annual session was referred to the Council on Scientific Work for its consideration. Another recommendation was that the Legislature pass appropriations to support the existing medical education facilities in Texas and that a bill be passed establishing a third medical branch of the University of Texas in Bexar County.

AMA Delegates.—The Delegates urged those present to study the special edition of the *Journal* of the American Medical Association (January 17) on medical care plans and expressed the hope that every Texas doctor attending either the annual session of the AMA in Atlantic City in June or the clinical session in Dallas December 1-4 will take time to observe the House of Delegates in action.

Committee on Cancer.—A symposium on "Cancer in Texas Today" and a scientific exhibit will be sponsored at the annual session.

Committee on Medical History.—This Commitee will cooperate with the Schering Corporation in an annual session exhibit dedicated to Dr. Anson Jones. Members of the Committee who prior to this time have been documenting the history of the Texas Medical Association have agreed to make their approach more general by writing the history of medicine in Texas.

Committee on Public Relations.—A suggestion was made to establish a committee of liaison between the Texas Medical Association and the Texas Pharmaceutical Association (both at the state and county level) so that future problems or issues of mutual interest can be discussed and carried out.

Committee on Mental Health.—The Committee suggested that the Board of State Hospitals and Special Schools be notified of the Texas Medical Association's reaffirmed suggestion of a permanent planning and advisory committee for the implementation of the Gerty Plan (the proposal which was presented by Dr. Francis J. Gerty of Chicago with regard to the mental health facilities in Texas).

Committee on National Emergency Medical Service.—In an effort to keep Texas from losing its emergency hos-

Few empty seats could be found during the guest presentations given before the orientees and county society officials in the Sam Thompson Room.

A latecomer walks down the crowded parking lot at the Texas Medical Association's headquarters building to enter the back entrance.

pital allotment, the Committee advocates the continuation of the program alerting county medical societies of the need for prepositioning of emergency hospitals. A brochure entitled "Principles of Mass Medical Care in Defense and Disaster: Administration" was to be sent to the county medical societies.

Committee on School-Physician Relationships.—Plans for a third statewide Conference on Physicians and Schools were discussed. Cooperation will be given the Texas High School Coaches Association in its program on athletic injuries in Fort Worth in August.

Committee on Rural Health and Doctor Distribution.—In an attempt to combat the problem that still exists in finding additional doctors for rural areas, Committee members set up a definite program outlining the advantages of rural practice. The program will be directed toward medical students.

Committee on Tuberculosis.—The revised draft of the state Tuberculosis Code was approved and its passage by the Legislature urged. Channels which will be used for disseminating educational material on the control of tuberculosis include a speakers' bureau, letters and pamphlets, the *Texas State Journal of Medicine*, and programs on tuberculosis at the county level. The Committee emphasized the importance of tuberculin skin testing and proper monitoring of x-ray equipment.

Dr. William A. Glenn, Amarillo, is served a cup of coffee by Mrs. Robert Farris, Austin, legislative chairman for the Travis County Woman's Auxiliary.

Committee on Scientific Exhibits.—A popularity poll designed to bring information from the membership regarding the appeal of specific exhibits will be taken during the 1959 annual session. Physicians will be asked to judge the exhibits on subject matter, value to the physician's practice, and excellence of presentation. With a limited area for scientific exhibits, priority is being given to Texas physicians and institutions and to exhibits with subject matter that appeals to the general membership.

Committee for Liaison with State Bar of Texas.—Approval was given for a code which would be used as a guide in the interprofessional relations of physicians and attorneys. The Committee recommends that the code be presented to the April House of Delegates.

Committee for Liaison with Workmen's Compensation Insurance Companies.—To inform Association members of the various phases of workmen's compensation laws, a series of bulletins is being prepared for submission to the *Texas State Journal of Medicine.* The pamphlet, "Physician's Medical Report Guide," distributed by the Committee on Public Relations, will be revised.

Committee on Cardiovascular Diseases.—Referral to the Board of Trustees was made of the suggestion that the pages discussing cardiovascular diseases which the Committee and the Texas Heart Association sponsor in the *Texas State Journal of Medicine* be bound and distributed to the Texas Medical Association membership. County medical societies will be asked to sponsor a hospital day devoted to cardiovascular diseases and possibly an evening seminar for lay and professional groups.

Committee on Asian Influenza.—Members requested that this Committee be discontinued in view of the fact that no problems have arisen over the control of Asian influenza. The Committee reported that the vaccine now available is polyvalent and deplores the action of governmental agencies in requiring the discontinuance of polyvalent vaccine during the stress of initiating the influenza vaccine.

Committee on Military and Veterans Affairs.—In recommending that physicians try to make an effort to refer their patients to other than federal hospitals, the Committee pointed out that instead, doctors could refer patients to the Vocational Rehabilitation Division of the Texas Education Agency or to nonfederal hospitals having residency training programs, many of which are seeking additional clinical material.

Appointees to the Texas Commission on Patient Care and Committee on Patient Care.—Two meetings were held with representatives of the Board of Nurse Examiners, the Texas Chapter, American Physical Therapy Association, and the Texas Social Welfare Association. The proposed Nurse Practice Act was discussed; the Texas Graduate Nurses Association has withdrawn from its sponsorship of the act.

Committee on Nuclear and Atomic Medicine.—A second symposium, "Fatal and Nonfatal Nuclear Accidents in the First Decade of the Atomic Age," will be held April 18 in connection with annual session. Committee members agreed to serve as advisers to the Division of Occupational Health, Texas State Department of Health, in matters of radiological defense.

Committee on Problems of the Aging.—County medical society presidents will be sent a letter suggesting that a committee on aging be appointed. Material is available at the headquarters office which can be used by these county committees.

Committee on Bracero Insurance and Medical Service.—A resolution which asks that the existing standard work contract for braceros be amended to stipulate that a small fee be paid the physician by the worker on the initial

visit for each nonoccupational illness was received and referred to the House of Delegates.

Committee on Voluntary Health Insurance and Health Care Costs.—In considering the problem of medical care of the aged, the Committee recommended that Blue Cross-Blue Shield be requested to prepare a proposal for improving health care services to Texas citizens over 65 on a prepaid service plan basis. The project, which would be a joint endeavor of the Texas Medical Association, the Texas Hospital Association, and Blue Cross-Blue Shield, was referred to the House of Delegates.

Committee on Spas.—The Executive Council referred to the House of Delegates a recommendation for the appointment of a Committee on Rehabilitation, which would coordinate and explain various aspects of rehabilitation and the roles which the various specialists and general practitioners play in this field. The Committee requested that a suggestion be made to the American Medical Association asking that the Council on Physical Medicine reactivate its Subcommittee on American Health Resorts, and that a program of evaluation and accreditation of American spas be started.

Dallas Reporter Anson Jones Winner

Winner of the current Anson Jones Award for outstanding lay medical reporting is Mrs. Judy Bonner, medical writer for the Dallas *Times-Herald.* Announcement comes from Dr. Joe R. Donaldson, Pampa, chairman of the Committee on Public Relations of the Texas Medical Association.

Initiated by the Association in 1956, the award of $250 and bronze plaque will be presented to Mrs. Bonner during the annual session. Two new features have been added to second and third place this year—$100 for second place, won by Blair Justice of the Fort Worth *Star-Telegram,* and $50 for third place, won by Miss Marjorie Clapp of the San Antonio *Light.*

Twelve presentations were submitted for the competition this year. They were by Jack Mohler, Burt Schorr, T. V. Thompson, and Miss Zella Maxwell, all of the Houston *Press;* Gene Wilburn, Houston *Chronicle;* Mrs. Laura Reesby, Galveston *Tribune;* Miss Helen Bullock, Dallas *News;* Harry McCormick, Dallas *News;* Miss Louise Evans, Amarillo *Globe-News;* Mrs. Bonner; Mr. Justice; and Miss Clapp.

The name of each of the nominees was submitted by the county medical society in his area in cooperation with the newspaper.

River Parade to Spark Annual Session Festivities

The Fiesta River Parade, a night illuminated water parade of floats depicting themes from great books and marking the arrival of King Antonio XXXVII in San Antonio, will be among the attractions of the 1959 annual session of the Texas Medical Association in San Antonio, April 18-21.

Floats for the parade are being prepared by civic and fraternal organizations, and the king is to be chosen from the Texas Cavaliers. Dr. J. Layton Cochran, former Texas Medical Association President, is the only doctor of medicine who has been a king.

Tickets for the parade, to be held on the San Antonio River Monday, April 20, have been reserved in special sections for the Texas Medical Association until April 1.

Fiesta Events

April 19: *Presentation of Miss Fiesta, 4:30 p. m.*
April 20: *Fiesta River Parade, 8:15 p. m.*
April 21: *A Night in Old San Antonio, 5-10 p. m.*
Street Dancing, 8:30 p. m.
April 22: *A Night in Old San Antonio, 5-10 p. m.*
April 23: *Garden Festival and Concert, 4-10 p. m.*
Fiesta Ceremonial Dress Parade, 4:30 p. m.
A Night in Old San Antonio, 5-10 p. m.
Band Festival, 7:30 p. m.
April 24: *Battle of Flowers, 3:30 p. m.*
A Night in Old San Antonio, 5-10 p. m.
Street Dancing, 8:30 p. m.

Further details are available from the Fiesta Association, 325 Majestic Building, San Antonio.

Tickets now may be reserved directly with the Fiesta Association at 325 Majestic Building, San Antonio, which will mail them to the physicians beginning in March. The reserved seats and prices are as follows:

Arneson River Theatre (center of parade activities), entered through gate 5:

Box seats with chairs (boxes 5-9), 105 tickets at $4.80.
Amphitheatre seats (rows D-Q), 187 tickets at $3.60.

Riverside seats (on river banks near the beginning of the parade in close proximity to the Hilton Hotel and La Villita), entered through gate 4:

Box seats with chairs (boxes 1-4), 181 tickets at $1.80.
Riverside chair seats (section G), 190 tickets at $1.50.

Riverside bleacher seats, unreserved (sections A-C), 760 tickets at $1.20.

After April 1, the sections blocked out for the Texas Medical Association will not be held. Tickets probably will be available, though perhaps at different locations and further from the hotels.

Medical school alumni banquets will precede the parade, most of them planned to conclude before the parade time at 8:30 p. m.

A seated dinner honoring Dr. Howard O. Smith, Marlin, President of Texas Medical Association, will be held Tuesday evening, April 21, in the Hilton Grand Ballroom.

The dinner will begin at 8 p. m., after fraternity parties, which will begin at 7. Tickets for the president's party

Pretty girls on beautiful floats can be seen in the Fiesta River Parade to be held Monday, April 20, during annual session in San Antonio. Tickets are now available in sections reserved for the Texas Medical Association.

with be $7.25 each and will be on sale at the registration desk.

Larry Herman's Orchestra will furnish music for dancing with Eduardo Martinez Mexican Revue providing the floor show.

Adding to the festive atmosphere, an American Legion "train," courtesy of the Mission Pharmacol Company, will provide transportation between the Menger, St. Anthony, Gunter, and Hilton Hotels, April 18-21.

Since Fiesta Week will be staged simultaneously with and following the annual session, it is important that physicians write for hotel reservations early, at which time designating how long they plan to stay. A block of rooms will be held at the Hilton Hotel until March 1 for Association officials, guest speakers, delegates, and exhibitors; thereafter, the rooms will be available on a first come, first served basis. All rooms elsewhere promised for the medical meeting may be allocated immediately to anyone planning to attend; a list of hotels and motels was published in the October *Journal*, page 751.

The complete program for the annual session will appear in the March *Journal*.

★ American Medical Association

AMA Appoints Former Hoover Aids

Dr. F. J. L. Blasingame, executive vice-president of the American Medical Association, has announced the appointment of Arthur Kemp, Ph.D., professor of economics, Claremont Men's College and Graduate School, Calif., as director of the AMA Bureau of Medical Economic Research. Dr. Kemp was an assistant to former President Herbert Hoover in recent years; he succeeds retiring Frank G. Dickinson, Ph.D., of Evanston, Ill., in the position.

Dr. Johnson F. Hammond has replaced Dr. Austin E. Smith as editor of the Journal of the American Medical Association. Edwin (Pat) Patterson of Washington, D. C., is the new manager of the AMA's Washington office. He was former director of the professional staff of the Veterans' Affairs Committee of the House of Representatives. Cecil B. Dickson has been announced as a new legislative representative in the Washington office of the Association.

Dr. Franklin C. Yoder, Cheyenne, Wyo., has been named director of the AMA Division of Socio-Economic Activities. Director of the Wyoming Department of Public Health since 1957, he will head the division including the Bureau of Health Education, Economic Research Department, and the Councils on Industrial Health, National Defense, Medical Service, and Rural Health.

Rural Health Meet Set March 5-8

Mental health, aging, nutrition, dental health, costs of medical care, health insurance—and their effect on rural residents—will be highlighted at the fourteenth National Conference on Rural Health March 5-7 in Wichita, Kans. Sponsored by the American Medical Association's Council on Rural Health, the meeting is expected to attract 700 representatives of medicine, farm groups, mental agencies, and other lay groups.

Dr. Louis M. Orr of Orlando, Fla., president-elect of the American Medical Association, will be one of the speakers. A member of the sponsoring council is Dr. Allen T. Stewart of Lubbock.

★ County Societies

County Society Officers

Among officers named to county medical society posts this year are the following:

Andrews-Ector-Midland.—President-elect, Dr. John E. Bauman, Odessa; secretary-treasurer, Dr. Jack R. Walton, Midland; and delegate, Dr. William A. Wiesner, Odessa. Dr. Milton J. Loring of Midland became president.

Baylor-Knox-Haskell.—President, Robert L. Newsom, Munday; vice-president, Dr. Roy E. Wilson, Seymour; secretary-treasurer, Dr. Charles G. Markward, Knox City; and delegate, Dr. T. S. Edwards, Knox City.

Bee-Live Oak-McMullen.—President, Dr. E. W. Muecke, Three Rivers; vice-president, Dr. J. L. Reagan, Beeville; secretary-treasurer, Dr. G. W. Sansom, George West; and delegate, Dr. Muecke.

Bexar.—President-elect, Dr. J. J. Hinchey; secretary, Dr. Leon C. Kopecky; treasurer, Dr. Dan A. Russell, Jr.; delegates, Dr. J. L. Cochran, Dr. Jack B. Lee, Dr. A. F. Clark, Jr., Dr. Arthur C. Ressmann, Dr. Jack M. Partain, and Dr. John H. Bohmfalk; all of San Antonio. Dr. Walter Walthall, also of San Antonio, took over as president.

Cameron-Willacy.—President, Dr. George E. Bennack, Raymondville; vice-president, Dr. William F. Ross, San Benito; secretary-treasurer, Dr. Verne F. Goerger, Raymondville; and delegates, Dr. Phil A. Bleakney, Harlingen, and Dr. Lee Works, Brownsville.

Cass-Marion.—President, Dr. Thurmon M. Steed, Jr., Hughes Springs; vice-president, Dr. T. K. Nichols, Atlanta; secretary-treasurer, Dr. Louise N. Wilcox, Hughes Springs; and delegate, Dr. Joe D. Nichols, Atlanta.

Cherokee.—President, Dr. James H. Kreimeyer, Rusk; vice-president, Dr. Edward L. Mahon, Jr., Jacksonville; secretary-treasurer, Dr. Thomas H. Cobble, Rusk; and delegate, Dr. George M. Hilliard, Jacksonville.

Clay-Montague-Wise.—President, Dr. Robert E. Hurn, Henrietta; secretary-treasurer, Dr. Berry N. Squyres, Bowie; and delegate, Dr. James T. Darwin, Decatur.

Comal.—President, Dr. J. K. Schaefer; vice-president, Dr. Frederick Frueholz, Jr.; secretary-treasurer, Dr. S. M. Woodward; and delegate, Dr. Jack A. Bergfeld, all of New Braunfels.

East Harris Branch of Harris.—President-elect, Dr. George D. Bruce; vice-president, Dr. Percy R. Fayle; secretary, Dr. Charles L. Liggett; and treasurer, Dr. H. W. Kilpatrick, all of Baytown. Dr. Karl T. Sammons of Baytown became president.

Hays-Blanco.—President, Dr. David L. White; vice-president, Dr. Rugel F. Sowell, Jr.; secretary-treasurer, Dr. Benge Elliott, all of San Marcos; and delegate, Dr. Ray E. Bullard, Jr., Blanco.

El Paso.—President-elect, Dr. Delphin von Briesen; vice-president, Dr. Louis W. Breck; secretary, Dr. Ward Evans; treasurer, Dr. Gilbert Landis; and delegates, Dr. Merle D. Thomas, Dr. Russell L. Deter, and Dr. Ira A. Budwig, all of El Paso. Dr. Branch Craige of El Paso became president.

Ellis.—President, Dr. John M. Montgomery, Milford; vice-president, Dr. John G. Compton, Jr., Waxahachie; secretary-treasurer, Dr. Norman L. West, Waxahachie; and delegate, Dr. Herbert Donnell, Waxahachie.

Freestone.—President-elect, Dr. Maurice Gage, Teague; vice-president, Dr. William N. Sneed, Fairfield; secretary-treasurer, Dr. Jack R. Cox, Teague; and delegate, Leslie L. Bonner, Fairfield. Dr. Bonner took over the presidency.

Galveston.—President-elect, Dr. E. Sinks McLarty, Galveston; vice-president, Dr. Carroll T. Adriance, Galveston;

secretary-treasurer, Dr. Harry K. Davis, League City; delegates, Dr. William T. Anderson, LaMarque; Dr. Edward J. Lefeber, Galveston, and Dr. Joseph C. Magliolo, Dickinson. Dr. E. Peter Garber, Galveston, became president.

Grimes.—President-elect and vice-president, Dr. S. D. Coleman; secretary-treasurer, Dr. William S. Conkling; delegates, Dr. S. D. Coleman; all of Navasota. Dr. E. T. Ketchum was installed as president.

Hale-Floyd-Briscoe.—President, Dr. George H. Benzon, III, Plainview; vice-president, Dr. Pat Williams, Lockney; secretary-treasurer, Dr. Joseph A. O'Grady, Plainview; delegate, Dr. Marvin C. Schlecte, Plainview.

Hardin-Tyler.—President, Dr. Wade M. Parker; vice-president, Dr. Sam P. Copeland, Jr.; secretary-treasurer, Dr. George D. Tennison; delegate, Dr. Wallace J. Poshataske, all of Silsbee.

Hill.—President, Dr. Silas W. Grant; vice-president, Dr. James M. Buie; secretary-treasurer, Dr. Charles A. Garrett; and delegate, Dr. Dick K. Cason, all of Hillsboro.

Hidalgo-Starr.—President, Dr. Pruitt D. Terrell, McAllen; vice-president, Dr. Gerald S. Livengood, Mission; secretary-treasurer, Dr. George M. Lancaster, Weslaco; delegate, Dr. Marion R. Lawler, Mercedes.

Kaufman.—President, Dr. E. D. Lane, Terrell; vice-president, Dr. William DeVlaming, Kaufman; secretary-treasurer, Dr. M. J. Otero, Terrell; and delegate, Dr. G. H. Alexander, Terrell.

Lamar.—President-elect, Dr. Owen R. O'Neill; vice-president, Dr. James L. Clifford; secretary-treasurer, Dr. David C. Miesch; and delegate, Dr. N. L. Barker; all of Paris. Dr. M. A. Walker of Paris is president.

LaSalle-Frio-Dimmit.—President, Dr. Emmett N. Wilson, Jr., Pearsall; vice-president, Dr. Marion P. Primomo, Dilley; secretary-treasurer, Dr. William S. Wilson, Jr., Carrizo Springs; and delegate, Dr. B. E. Pickett, Sr., Carrizo Springs.

Nueces.—President-elect, Dr. James R. Riley; vice-president, Dr. Dan H. Clark; secretary, Dr. Rex Thomas; treasurer, Dr. C. R. Little; delegates, Dr. Fred Hartwick, Dr. W. T. Davis, and Dr. H. A. Kennedy; all of Corpus Christi. Dr. Paul M. Gray has become president.

Orange.—President, Dr. Wilson E. James; vice-president, Dr. Robert A. Ingram; secretary-treasurer, Dr. Robert F. Minkus; and delegate, Dr. Minkus, all of Orange.

Pecos-Jeff Davis-Presidio-Brewster.—President-elect, Dr. George A. Hoffman, Fort Stockton; vice-president, Dr. John W. Pate, Alpine; secretary, Dr. John C. Hundley, Fort Stockton; treasurer, Dr. Charles E. Oswalt, Jr., Fort Stockton; and delegate, Dr. D. J. Sibley, Jr., Fort Stockton.

Potter-Randall.—President-elect, Dr. H. Fred Johnson, Amarillo; vice-president, Dr. Edward F. Thomas, Amarillo; secretary, Dr. Holley W. Reed, Amarillo; and delegates, Dr. E. A. Rowley, and Dr. William Klingensmith, Jr.; all of Amarillo. Dr. G. Ernestine Smith of Amarillo became president.

Red River.—President, Dr. Earl E. Brooks, Bogata; vice-president, Dr. James L. Wright, Clarksville; and secretary-treasurer, Dr. Rex L. Edwards, Clarksville.

Tarrant.—President-elect, Dr. Walter B. West; vice-president, Dr. John H. Richards; secretary-treasurer, Dr. Emory Davenport; and delegates, Dr. Thomas L. Shields, Dr. Mal Rumph, Dr. R. V. Brasher, Dr. W. P. Higgins, Jr., and Dr. Drue O. D. Ware; all of Fort Worth. Dr. Robert D. Moreton of Fort Worth assumed the duties of president.

Taylor-Jones.—President-elect, Dr. J. D. Magee, Jr.; vice-president, Dr. O. E. Harper; secretary-treasurer, Dr. Jarrett E. Williams; and delegate, Dr. R. W. Varner; all of Abilene.

Howard-Martin-Glasscock.—President, Dr. George E. Peacock; vice-president, Dr. E. V. Swift; secretary-treasurer, Dr. B. Broadrick; and delegate, Dr. R. B. G. Cowper; all of Big Spring.

San Patricio-Aransas-Refugio.—President-elect, Dr. Charles H. Simpson; secretary-treasurer, Dr. F. Stanley Ewing; and delegate, Dr. Claude A. Selby; all of Sinton. Dr. James L. Pierce, Jr., of Sinton became president.

Van Zandt.—President, Dr. Raymond W. Cozby, Grand Saline; vice-president, Dr. W. J. Garrett, Van; secretary-treasurer, Dr. R. M. Golladay, Wills Point; and delegate, Dr. H. A. Baker, Wills Point.

Webb-Zapata-Jim Hogg.—President, Dr. Lauro Montalvo; vice-president, Dr. George E. Penny; secretary-treasurer, Dr. Leonides G. Cigarroa; and delegate, Dr. Joaquin G. Cigarroa, Jr., all of Laredo.

Wharton-Jackson-Matagorda-Fort Bend.—President-elect, Dr. Franz E. Amman, Rosenberg; secretary-treasurer, Dr. James R. Sawyers, Edna; and delegate, Dr. Granville E. Horton, Wharton. Dr. Joseph N. Bader of Edna took over the duties as president.

Travis Society Has New Secretary

Roy J. Cates has been employed as executive secretary of Travis County Medical Society and administrative director of the Blood Bank. He assumed his duties February 1. He succeeds Charles L. Collum, Jr.

Mr. Cates received a bachelor of arts degree from Texas Christian University and a master of journalism degree from the University of Texas. He has had extensive experience in communications, including newspaper and magazine writing, radio and television acting and producing. Most recently he was assistant executive director of the Seventy-Fifth Anniversary of the University of Texas.

County News Briefs

At the *Tom Green-Eight County Medical Society* meeting December 1, Dr. K. B. Round of San Angelo, president, gave a report on the society's accomplishments of the year, emphasizing the benefits obtained from the formation of the executive committee. The committee meets monthly to screen and organize business for the subsequent regular meeting and to formulate some recommendation regarding questions to come up.

Dr. Francis M. Spencer, San Angelo, incoming president, as well as other new officers were introduced to society members. Robert E. Eckert, certified public accountant, discussed the Jenkins-Keogh Bill (House Bill 10) which would permit the establishment of a tax free retirement fund by the self-employed.

Members of *Tarrant County Society* were dinner guests of the medical staff of the United States Public Health Service Hospital on November 4 in Fort Worth. Following the dinner, Dr. Robert W. Rasor, deputy medical officer in charge of the hospital, spoke on "A Review of the Treatment Program of the United States Public Health Service Hospital, Fort Worth, in the First 20 Years of Operation."

The society approved the establishment of a Community Blood Bank Center in Fort Worth. Dr. William E. Flood, president, announced the dedication of the Duncan Memorial Hospital.

A buffet dinner and social hour was held by the *Pecos-Jeff Davis-Presidio-Brewster Countiess Medical Society,* December 2, in Fort Stockton. After the election of officers, Dr. J. D. Lancaster spoke on trying to increase the attendance of the society.

Harris County Society met in Houston January 15 to install officers. Dr. Theodore Klumpp, president of Winthrop Laboratories, was the guest speaker.

When the *Hill County Medical Society* met in Hillsboro January 9, the group saw a film, "Current Treatment of Diabetes," provided through the courtesy of the Upjohn Company.

"Partners for Health" was the subject of S. Sloan Colt of New York, immediate past chairman of the board of the Bankers Trust Company, when he addressed the *Dallas County Medical Society* at its annual dinner and installation of officers January 13. Dr. Floyd A. Norman became new president.

"Uses of Diuretics in Heart Disease" was the topic of Dr. William H. Gordon, Lubbock, at a recent meeting of *Hardeman-Cottle-Foard-Motley Counties Medical Society.* Several members were appointed to supervise showing of breast cancer films to lay groups, in cooperation with the American Cancer Society.

Meeting jointly on February 9 were the *Potter-Randall Counties Medical Society* and the Amarillo Dental Society. Guest speaker was Dr. Herbert K. Cooper, director of the Lancaster Cleft Palate Clinic, Lancaster, Pa., and professor of cleft palate therapy at the University of Pennsylvania.

At a December meeting of this society, Dr. Capres S. Hatchett of Amarillo outlined the first steps necessary in establishing a branch of the University of Texas Postgraduate School of Medicine in Amarillo; Dr. J. V. Ellis was elected director of the planning commitee. Dr. Joe Latson, director of the cardio-physiology laboratory, Texas Children's Hospital, Houston, was guest speaker at the January meeting of the *Potter-Randall Counties Medical Society.* He is the son of Dr. H. H. Latson of Amarillo.

The *Bexar County Medical Society* held its annual inaugural meeting on January 14, with Dr. Theodore G. Klumpp of New York, president of Winthrop Laboratories, Inc., as guest speaker.

★ Woman's Auxiliary

Doctor's Day Celebrated March 30

March 30 is now recognized as Doctor's Day in the United States. In Puerto Rico, as of May, 1957, the first Sunday in September is designated as Physician's Day.

The date in March was selected as it was on that day in 1842 Dr. Crawford W. Long performed the first operation with anesthesia. On the anniversary of this event Doctor's Day has become a reminder and a tribute to all doctors who devote their lives to the service of mankind.

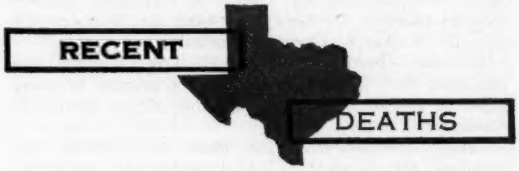
Mrs. T. H. Thomason, Fort Worth, Doctor's Day chairman of the Woman's Auxiliary to the Texas Medical Association, has assisted the county auxiliaries in planning events to honor their own doctors.

In some cities the mayors will write proclamations and the newspapers announce Doctor's Day. Members of the Auxiliary may select the day for the presentation of scholarships to medical students or nurses or focus attention on the medical profession by equipping hospital rooms or providing library books in memory of a beloved doctor.

Many suggestions have been advanced, and it is hoped that each community will honor its doctors for their many years of unselfish devotion to the practice of medicine. March 30, 1959, should find every doctor in Texas wearing a red carnation, as the red carnation is the symbol of the love and respect felt for him and tendered to him on that day.

—MRS. JAMES M. COLEMAN, Austin.

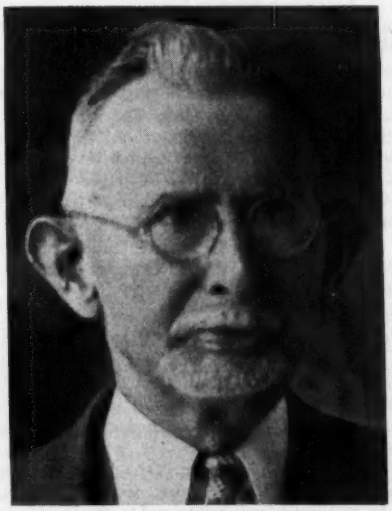
Officers of the Woman's Auxiliary to the Texas Medical Association for 1958-1959: President, Mrs. John D. Gleckler, Denison; President-Elect, Mrs. Haskell D. Hatfield, El Paso; First Vice-President, Mrs. William D. Nicholson, Freeport; Second Vice-President, Mrs. G. G. Passmore, San Antonio; Third Vice-President, Mrs. Ralph B. Payne, Amarillo; Fourth Vice-President, Mrs. G. V. Brindley, Jr., Temple; Fifth Vice-President, Mrs. George M. Hilliard, Jacksonville; Treasurer, Mrs. Andrew J. Magliolo, Dickinson; Recording Secretary, Mrs. Thomas J. Vanzant, Houston; Corresponding Secretary, Mrs. Rene G. Gerard, Denison; Publicity Secretary, Mrs. James M. Coleman, Austin; Parliamentarian, Mrs. Truman C. Terrell, Fort Worth; Executive Secretary, Miss Hazel Casler, Austin.



DR. WILLIAM E. YORK

Dr. William Edward York, a past president of the Lee County Medical Society for nine terms, died in Giddings December 7, 1958, of a cardiovascular accident.

Dr. York was born at Evergreen near Lincoln in Lee County on August 9, 1870, the son of the late Milton G. and Matilda (Heck) York. He attended Giddings schools and was graduated from the University of the South, Sewanee, Tenn., and later from Tulane University School of Medicine, New Orleans. Following his graduation, he practiced at Giddings, moving to Dime Box in 1896, but re-



DR. WILLIAM E. YORK

turning to Giddings again in 1902. He practiced there until 1952, when failing eyesight forced him to limit his practice. In 1953, after the complete loss of his sight, he went into full retirement. Dr. York served on the State Medical Advisory Board for Procurement of Physicians from 1940 to 1947 and received a certificate from Governor Beauford Jester for his service to Texas. He also received a certificate of appreciation for these patriotic services rendered during World War II from President Franklin D. Roosevelt.

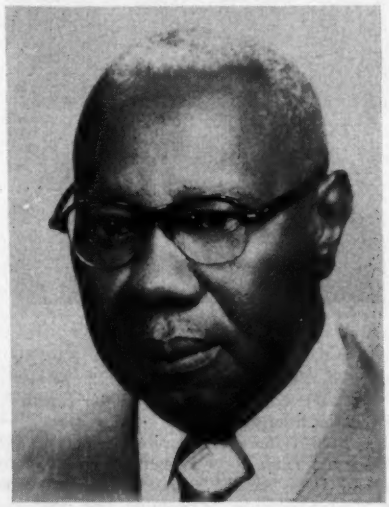
Holding membership in the Texas Medical Association since 1904, Dr. York was elected to honorary membership in the Association in 1945. As charter member of the Lee County Medical Society, Dr. York was secretary for that society from 1943 to 1946, in addition to the terms he served as president. He was a member of the Baptist Church, having served as deacon since 1899, as secretary-treasurer for 7 years, and Sunday school teacher for 3 years. He also belonged to the Masonic Lodge, became a master mason in 1900, and was the recipient of a 50 year service award in that organization.

Dr. York is survived by his wife, Mrs. Annie Murray York; three sons, W. Patton York of Aurora, Ill., and Milton York and J. Alton York, both of Dallas; one daughter, Mrs. A. J. Rowe of Fort Worth; a brother, M. G. York, Jr., of Lincoln; one sister, Mrs. Addie Green of Giddings; four grandchildren; and seven great-grandchildren.

DR. CLARENCE B. FRIDAY

Dr. Clarence Claude Bauselle Friday of Seguin died at his home December 26, 1958.

Born in Yoakum on November 25, 1896, Dr. Friday was the only child of Newton and Ada Alice (Gentry) Friday. He attended San Antonio schools and received his medical degree from Howard University in Washington, D. C., in 1926. He did postgraduate study at John A. Andrew Postgraduate Assembly in Tuskegee, Ala., at the Prairie View Postgraduate Assembly, and at the University of Texas. He did his preceptorship under Dr. J. H. Thompson of West Palm Beach, Fla.



DR. CLARENCE B. FRIDAY

Dr. Friday practiced briefly in San Antonio and then came to Seguin in 1928, doing gynecology and general practice there for more than 30 years.

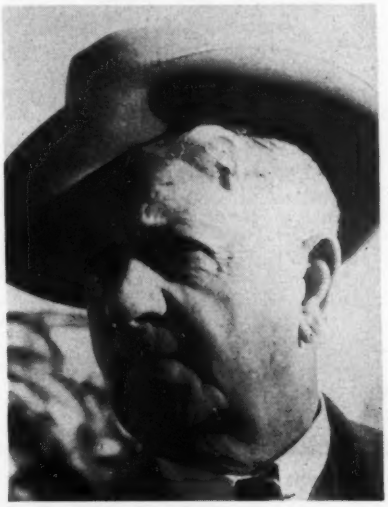
He served as president twice and as secretary for 23 years for the Southwest Texas District Medical, Dental, and Pharmaceutical Association, which presented him a plaque for "25 years of faithful and distinguished service." He had been president and executive secretary of the Lone Star State Medical Association, a member of the Guadalupe County Medical Society, Texas Medical Association, American Medical Association, and National Medical Association, as well as a member of Kappa Alpha Psi fraternity and a thirty-second degree Mason. He was trustee of the Second Baptist Church in Seguin for 25 years and was a director of the Guadalupe County Community Fund.

Surviving are his wife, the former Miss Lelia Dorothy Johnston of Seguin; a daughter, Mrs. Earl Moseley, and a grandson, Clarence, also of Seguin.

DR. EDWARD G. SMITH

Dr. Edward Greer Smith, Mercedes, died December 10, 1958, of a cerebral hemorrhage.

Son of J. H. and Ann (Greer) Smith, he was born February 19, 1872, at Alto. Attending schools at Alto and Hico, Dr. Smith was graduated in 1904 from Dallas Medical College at Dallas (now the Baylor University College of Medicine), having previously attended the Fort Worth School of Medicine, Medical Department of Fort Worth University. Dr. Smith practiced at King, Evan, Turnersville, Gatesville, and Malone, before moving in 1926 to Mercedes, where he practiced until 1955, when he retired. Dr. Smith especially was interested in obstetrics and gynecology. He was county health officer of Coryell County for 4 years and was city health officer at Malone for 5 years, holding that same position in Mercedes for 6 years. He was assistant surgeon and then surgeon in charge of the Hidalgo station. For 32 years he served as the local physician for the Missouri Pacific Railroad; he was also city commissioner at Mercedes. Dr. Smith received a medal



DR. EDWARD G. SMITH

for and a certificate of merit for his work with Selective Service during World War II.

A member of the Hidalgo-Starr Counties Medical Society, Dr. Smith also belonged to the Mercedes Masonic Lodge and the Baptist Church. He had belonged to the Texas Medical Association since 1904 and in 1951 was elected to honorary membership in this Association.

Dr. Smith and the former Miss Dovie Bone were married at King in 1906; she died in 1930. In 1933, he married Mrs. Norma Hill Agnew of San Antonio, who survives him. Other survivors include a stepson, Blake Agnew of Miami Springs, Fla.; three nephews, John Smith of Killeen, and Carl and Robert Thomason of Harlingen; three nieces, Amie Smith Sanders of Hamilton; Ila Smith Wiginton of Houston, and Amelia Smith Lakey of Raymondville.

DR. BEN A. DREIBRODT

Dr. Ben Allen Dreibrodt, a San Antonio internist who lived in Helotes, died December 22, 1958, as a result of an automobile accident.

Born October 11, 1913, at Bishop, Dr. Dreibrodt was the son of Ben A. and Buena (Lindeman) Dreibrodt. He

DR. BEN A. DREIBRODT

attended San Antonio schools, Texas Lutheran College at Seguin, and the University of Texas at Austin. Receiving his doctor of medicine degree from the University of Texas Medical Branch at Galveston in 1938, he interned at Providence Hospital in Waco the following year. He served residencies at Greenville General Hospital, Greenville, S. C., and at Duval County Hospital, Jacksonville, Fla. In 1949 he was certified by the American Board of Internal Medicine. Prior to establishing a practice at San Antonio in 1946, he served as a flight surgeon in the United States Army Air Corps. He held the rank of captain, and for his service during World War II was given a presidential citation and six battle stars.

Holding membership in the Texas Medical Association through the Bexar County Medical Society, Dr. Dreibrodt belonged to the American Medical Association and Phi Chi medical fraternity. He was also a member of the Grace Lutheran Church, the Helotes Lions Club, and the program and policy commission of the American Lutheran Church. His hobbies were hunting and fishing.

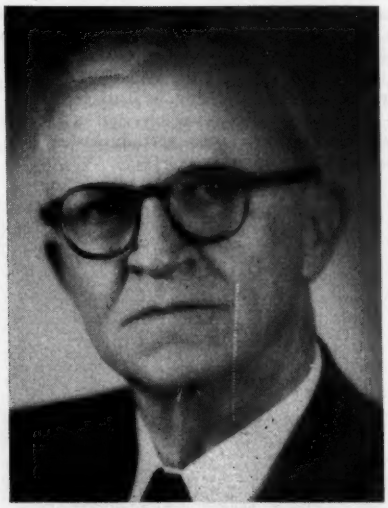
Members of the family who survive include his mother, Mrs. Buena Lindeman Dreibrodt, and a brother, Irving Dreibrodt of Dallas.

DR. IVISON GRIMES

Dr. Ivison Grimes of Camden died December 11, 1958, as a result of a heart attack.

A native of Smith Ferry, Dr. Grimes was born June 18, 1891, the son of Jerry and Amanda (Hallomon) Grimes. Attending Jasper Schools, Dr. Grimes received his degree in medicine in 1914 from the University of Tennessee College of Medicine at Memphis. After an internship at Parkland Hospital in Dallas, he established a practice in Voth, later practicing in Carmona, Corrigan, Goose Creek, and New Willard, before moving in 1934 to Camden, where he stayed until 1949. He then moved to Woodville where he stayed for 5 years, returning to Camden in 1953, where he stayed until his death. Dr. Grimes had done postgraduate work at Tulane University School of Medicine in New Orleans and at Chicago. He served as a first lieutenant in the Medical Reserve Corps during World War I.

A member of the Texas Medical Association through the Polk-San Jacinto Counties Medical Society, he was also a member of District 9 Medical Society. Dr. Grimes at one time had belonged to the Jefferson County Medical Society and the Hardin-Tyler Counties Medical Society, serving as president of the Hardin-Tyler society in 1953 and



DR. IVISON GRIMES

as secretary of the Polk-San Jacinto society in 1941-1942 and in 1948. Dr. Grimes belonged to the Baptist Church and enjoyed fox hunting.

Members of the family who survive include his wife, the former Miss Eva Handley of Barnes, whom he married in 1926; a son, Jerry Handley Grimes of Camden; one sister, Mrs. T. C. Hicks of Woodville; and one grandson, Jesse Ivison Grimes of Camden.

DR. SETH A. McCONNELL

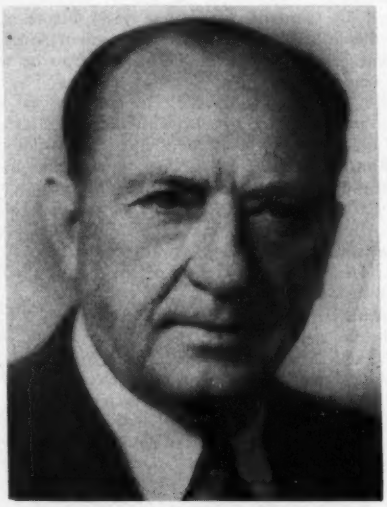
Dr. Seth Anderson McConnell of Galveston, an honorary member of the Harris County Medical Society since 1948, died in Galveston November 18, 1958.

Born in Franklin on September 30, 1886, Dr. McConnell was a graduate of State Teacher's College in Huntsville and of the University of Texas. He received his medical degree at the latter institution in 1916 and also held a degree in law.

Dr. McConnell served in the United States Army from 1916 to 1929, retiring with the rank of major. During World War I, he received the croix de guerre from the French government.

Dr. McConnell's contribution to medicine included work in rabies and pellagra. His Army practice after World War I was almost exclusively in large hospitals where he was in charge of the mental and nervous sections. From 1930 to 1934, he was superintendent of the State Hospital of Louisiana Criminally Insane. He was a member of the American Medical Association and the Texas Medical Association, being an honorary member of the latter organization since 1940.

Surviving is a son, Dr. Joseph H. McConnell of Galveston.



DR. SETH A. McCONNELL

DR. JOHN B. CUMMINS

Dr. John Bigelow Cummins of Fort Worth, who recently celebrated his one hundredth birthday and who according to the American Medical Association records was the oldest practicing physician in the United States, died December 31, 1958, following a fall a week earlier.

Born November 7, 1858, in Jackson County, Tenn., Dr. Cummins attended Burritt College, Spencer, Tenn., and Southern Normal College, Bowling Green, Ky., Before being graduated in medicine from the University of Nashville in 1897, he attended Illinois Medical College at Chicago and the Medical Department of University of the South at Sewanee, Tenn. After practicing in Navarro County and in Northern Louisiana, Dr. Cummins established a general practice in Fort Worth, where he was lecturer in obstetrics for several years at the old Fort Worth University School of Medicine. During his medical career, Dr. Cummins did postgraduate work at the New Orleans Poly Clinic, Cooke County Postgraduate School of Medicine at Chicago, American Hospital at Chicago, Printy's Surgical Laboratory, University of Nashville, Galveston Tumor and Cancer Clinic, Dallas Southern Clinical Society, and the International Postgraduate Medical Assembly at San Antonio.

Belonging to the Texas Medical Association since 1909, Dr. Cummins was elected to honorary membership in the Association in 1953. He also belonged to the Tarrant

DR. JOHN B. CUMMINS

County Medical Society, American Medical Association, Southern Medical Association, American Academy of General Practice, Texas Academy of General Practice, and the Fifty Year Club for Texas physicians. He was named General Practitioner of the Year of Tarrant County in 1950 and was made an honorary member of the Methodist Association and Harris Hospital in Fort Worth in 1956.

Dr. Cummins and the former Miss Lillie Carnes were married at Smithfield, Tenn., in 1899. She died in 1917. Members of the family who survive include a niece, Mrs. A. B. Pumphrey of Fort Worth, a past president of the Woman's Auxiliary to the Texas Medical Association.

DR. D. EMERY ALLEN

Dr. Frances D. Emery Allen of Fort Worth, said to be the first woman physician licensed to practice medicine in Texas, died December 7, 1958, of arteriosclerotic heart disease, a cerebrovascular accident, and general arteriosclerosis.

A native of Kaufman County, she was born September 5, 1876, the daughter of James Wallace and Elizabeth Jane (Brown) Emery. Receiving her preliminary education in Kaufman and Fort Worth schools, Dr. Allen was graduated cum laude in 1897 from the Fort Worth School of Medicine, Medical Department of Fort Worth University. Interning at the Women and Children's Medical Center in Washington, D. C., she later served a residency at this center. She practiced at Dallas; Vinson, Oklahoma; Content;

DR. D. EMERY ALLEN

DR. CLAUNCH G. BRINDLEY

Goldsboro; and Newark until 1914 when she opened private practice at Fort Worth which continued until 1950 when she retired. While in Dallas, Dr. Allen was appointed to the chair of diseases of children and was professor of embryology and pediatrics at Dallas Medical College, and while in Fort Worth, she was clinical professor of diseases of children at the Fort Worth School of Medicine. She served on the staffs of Harris, All Saints, and St. Joseph's Hospitals. She was a volunteer physician at the Wesley Community Center, and the John Peter Smith Hospital.

A member of the Texas Medical Association since 1915, Dr. Allen was elected to honorary membership in this Association in 1949. She belonged to the Tarrant County Medical Society, the American Medical Association, the American Medical Women's Association, and Fort Worth Academy of Medicine, and was a charter member of the Fifty Year Club. Dr. Allen also held memberships in the Chamber of Commerce, League of Women Voters, Fort Worth Club, Tarrant County Association for Mental Health, and Texas Association for Mental Health. She was a member of the First Methodist Church.

Dr. Allen and Dr. James Walter Allen were married November 30, 1903, at Dallas. Dr. Walter Allen died in 1913, shortly before the couple received an assignment which would have taken them as medical missionaries to a hospital in China.

Members of the family who survive include two daughters, Miss Frances Marion Allen and Miss Sheila Emery Allen, and one sister, Mrs. J. W. Bright, all of Fort Worth.

DR. CLAUNCH G. BRINDLEY

Dr. Claunch Goldthwaite Brindley, who had been in practice in Borger since 1951, died in a Houston hospital October 22, 1958, of cancer.

Born November 21, 1908, in Maypearl, Dr. Brindley attended Temple Junior College and the University of Texas, Austin, before receiving his medical degree in 1933 from the University of Texas Medical Branch, Galveston. He served an internship at the Roper Hospital, Charleston, S. C., and a residency in general surgery and gynecology at Scott and White Hospital, Temple, where he was surgical assistant to his uncle, Dr. G. V. Brindley. He then practiced in Cameron for a few years before going to Kingsville in 1941. During his residence in Kingsville he took time out for service in the Navy, where he was lieutenant senior grade.

While he was in Kingsville, Dr. Brindley was chief of surgeon for the St. Louis, Brownsville, and Mexico Railway Employees' Hospital Association, physician for the King Ranch and for Texas College of Arts and Industries, chief surgeon for the Gulf Coast Lines Railroad, a member of the Rotary Club, and a member of the First Methodist Church. In Borger he was a member of the Lions Club, the American Legion, and a steward in the First Methodist Church. He was also president of the North Plains Hospital Staff.

A member of the Texas Medical Association successively through the county societies having jurisdiction over the areas in which he practiced, Dr. Brindley was a member of the state organization's House of Delegates in 1940 and from 1946 through 1950. He was secretary of the Milam County Medical Society in 1939 and 1940. He also belonged to the American Medical Association, the American Academy of General Practice, and the Southern Medical Association and was medical advisor of the Hutchinson County Chapter of the American Cancer Society.

Surviving Dr. Brindley are his wife, Cecile, three sons, Bethea Wright Brindley, a student at the University of Texas, and Paul Claunch Brindley and Mace Lain Brindley, both of Houston; his mother, Mrs. Sarah Brindley Scott, Harlingen; a brother, Mace Brindley, Oakdale, La.; and two sisters, Mrs. Isaac Corns, Oklahoma City, and Mrs. Robert Myers, Oakdale, La.

DR. G. A. DEASON

Dr. Giles Arthur Deason, who practiced medicine in Henderson for 30 years and had maintained his membership in the Texas Medical Association until recently, died November 25, 1958, of carcinoma of the esophagus in Shreveport, La., where he had been serving with the Veterans Administration Hospital since 1947.

Born October 6, 1888, in Rusk County, Dr. Deason

was the son of the late Dr. Tim Deason and Margaret Ann (Welch) Deason. He attended Mount Enterprise High School and then Baylor University College of Medicine in Dallas, where he received his degree in 1914. He interned at Baylor Hospital, later practicing at Pirtle, Garrison, Port Arthur, and Laneville. Having practiced in Henderson from 1920 to 1925, he returned there in 1928, remaining until 1947. During World War I, he served in France with the United States Army Medical Corps Evacuation Hospital 14. In 1915, he married Miss Cleo Dunklin, who died in 1948.

Dr. Deason for many years was a member of the American Medical Association through the Texas Medical Association and the Rusk County Medical Society. He was president of the Rusk society in 1934 and 1935.

Survivors include his widow, Mable Ditto Deason of Henderson, whom he married in 1956; a son, Giles LeRoy Deason of Shreveport; two stepdaughters, Mrs. G. A. Curtis of Shreveport, La., and Mrs. A. E. Garrett of Jacksonville; three grandchildren, Scooter Garrett and Gay Ann Garrett of Jacksonville and Mark Curtis of Shreveport; four brothers, Dr. Loyd Deason, Andrew J. Deason, and Charlie Deason, all of Henderson, and Franklin Deason of Brachfield; and two sisters, Mrs. Minnie Jones of Brachfield and Mrs. Vada Farley of New Summerfield.

DR. IRVING E. COLEF

Dr. Irving E. Colef of Corpus Christi died of coronary thrombosis November 5, 1958.

Son of Charles and Rollie Colef, he was born in Benton Harbor, Mich., in 1903. He attended the University of Michigan at Ann Arbor and was graduated from Wayne University Medical School in Detroit in 1929, later interning at Butterworth Hospital in Grand Rapids, Mich.

Dr. Colef specialized in endocrinology, metabolic diseases, and arthritis. He was assistant chief of staff at Taber Sanitarium in Benton Harbor for 7 years, and on the senior staff of Mercy Hospital, Benton Harbor, and St. Joseph Sanitarium there from 1930 to 1940.

Coming to Corpus Christi in 1942, Dr. Colef was president of that city's B'nai B'rith. He had been past president of the Temple Bethel in Benton Harbor, as well as chairman of the United Jewish Appeal Drive.

He was a member of the American Medical Association, the Texas Medical Association, the Texas Industrial Medical Association, and the Nueces County Medical Society.

He is survived by his wife, the former Miss Minerva Weisman, whom he married in Kalamazoo, Mich., in 1926; a daughter, Miss Meri Rae Colef of Corpus Christi; and two brothers, Sam Colef of Kalamazoo and Dr. Saul Colef of Hollywood.

DR. A. C. TRAWEEK, SR.

Dr. Albert Carroll Traweek, Sr., pioneer physician of Matador, who was known for decades as "the pneumonia doctor" in his region, died on January 11, 1959, in a Quanah hospital. Cause of death: pneumonia.

Dr. Traweek was born December 1, 1875, in Comanche. He was the son of Alfred I. and Georgia (Oates) Traweek. Receiving his early education in Dublin, he was awarded his medical degree from the then Fort Worth University Medical Department in 1901, interned and did his residency at Chicago Polyclinic and did postgraduate work at New York Polyclinic.

In 1898, Dr. Traweek married Miss Allie Rainey of Fort Worth and the couple moved to Matador. He made his calls in the Matador ranch country on horseback and by horse and buggy, later modernizing his methods by buying the first motorcycle in Motley County and, still later, one of the first cars in the county. On some occasions, he and his friends built their own roads. Before building the first hospital in Matador, Dr. Traweek often did surgery in his own home. He did the first intubation for diphtheria in Motley County on his own daughter and the first anastomosis of bowel in his area.

Dr. Traweek belonged to the American Medical Association; was a charter member of the Panhandle Medical Association and member of the Hardeman-Cottle-Foard-Motley Counties Medical Society; and was a member of the Texas Medical Association's House of Delegates for more than 50 years. He was a member of the Texas and American Academies of General Practice; was Motley

DR. IRVING E. COLEF

DR. A. C. TRAWEEK, SR.

County health officer since 1897; and attended Dallas Southern Clinical Society meetings for 26 years. He was a Mason, member of the Lions Club, and a Methodist. He was a medical examiner for draftees during World Wars I and II. He enjoyed hunting, rifle shooting, and travel.

Survivors are his wife; two sons, Dr. A. C. Traweek, Jr. and Howard Traweek, both of Matador; three daughters, Mary Rosenstein, D.D.S. of Houston, Mrs. Orvil Wells of Dallas, and Mrs. Ralph Dockendorf of Baytown, Texas; six grandchildren and one great-grandchild.

DR. RAWLEY E. CHAMBERS

Dr. Rawley Ernest Chambers, former director of mental hospitals for the state of Texas, died November 14, 1958, at Brooke Army Hospital in San Antonio. Cause of death was carcinoma of the prostate with widespread metastases.

Born May 11, 1895, in Lakeview, Ohio, Dr. Chambers was the son of Dr. and Mrs. John W. Chambers. He was graduated from the Ohio State University College of Medicine in 1926, interning at Letterman Army Hospital in San Francisco.

Dr. Chambers was a member of the Army Medical Corps from 1926 to 1955, retiring with the rank of brigadier general. During his 30 years' service, he was stationed at such places as Walter Reed Hospital in Washington, D. C.; Gorgas Hospital, Ancon, Canal Zone; a hospital center in England; Fitzsimons Army Hospital in Denver; and Brooke Hospital at Fort Sam Houston.

Director of mental hospitals for the state of Texas from June, 1955, to September, 1957, Dr. Chambers became assistant director in September, 1957, and served in that capacity until a few days before his death.

He was a member of the Travis County Medical Society, Texas Neuropsychiatric Association, Texas Medical Association, American Medical Association, Texas Association for Mental Health, American Psychiatric Association, and Group for Advancement of Psychiatry. He was a diplomate of the American Board of Psychiatry and Neurology. Other memberships included Alpha Chi Sigma, Phi Rho Sigma, and Masons; he was a vestryman of St. Paul's Episcopal Church in San Antonio.

Dr. Chambers married Miss Anna Rose McIntire in Columbus, Ohio, on June 23, 1923.

He is survived by his wife; a daughter, Miss Martha Joyce Chambers of San Antonio; a son, John Kenneth Chambers of Denver; a brother, Perry Chambers of Cleveland; and a sister, Mrs. Dale Dillinger of Akron, Ohio.

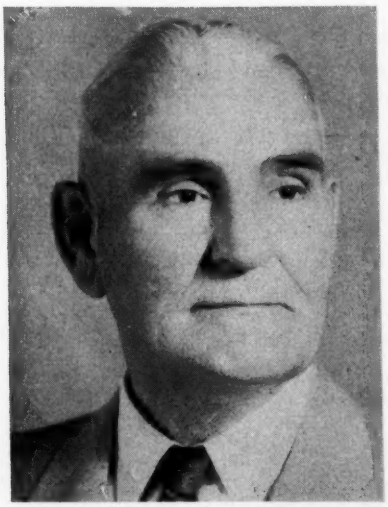
DR. SILAS M. YARBROUGH

Dr. Silas McWilliams Yarbrough of Gainesville died November 9, 1958, of cerebral thrombosis.

A native of Athens, Alabama, and the son of Walter Murray and Mattie Lou (Evans) Yarbrough, Dr. Yarbrough was born December 7, 1898. He attended Auburn College at Auburn, Alabama, Vanderbilt University at Nashville, Tennessee, and was graduated in 1923 from the Vanderbilt Medical School also at Nashville. He served an internship from 1923 to 1924 at Parkland Hospital in Dallas. Before going to Gainesville to practice, Dr. Yarbrough practiced at Abilene where he was the assistant superintendent of the Abilene State Hospital. He was the author of several scientific articles and served in the United States Army during World War I.

A member for many years of the Texas Medical Association, he was elected to honorary membership in this organization in 1955. Dr. Yarbrough was president of the Cooke County Medical Society in 1932, 1944, and again in 1945, and was a member of the American Medical Association, Phi Beta Pi medical fraternity, Phi Kappa Psi fraternity, Methodist Church, Chamber of Commerce, and Woodmen of the World. A member of the Kiwanis Club for 20 years, Dr. Yarbrough was a Scottish Rite Mason and a Shriner. For 25 years he had been a member of the Gainesville Community Circus and physician for the Gainesville football team. His hobbies were athletics, fishing, and hunting.

Dr. Yarbrough and the former Miss Ruby Eloise Gaines were married in Abilene in 1936. She survives as do two sons, Silas M. Yarbrough, Jr., of Dallas and David B. Yarbrough of Bryan, and one daughter, Mrs. Richard D. Buttolph of Gainesville.



DR. RAWLEY E. CHAMBERS

DR. SILAS M. YARBROUGH